

# **COSMETIC AND TOILETRY FORMULATIONS**

**Second Edition**

**Volume 5**

by

**Ernest W. Flick**



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*To*  
*Suzanne*

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# **Section I**

## **Antiperspirants and Deodorants**

### Anti-Perspirant Cream

Soft white cream. Leaves no visible traces of aluminum chlorohydrate on the skin.

#### Material/CTFA-Index:

A: Cetyl Alcohol	2,50%
Stearyl Alcohol	2,50
Locron P/Aluminum Chlorhydrate	15,00
Eumulgin M8/Oleth-10 (and) Oleth-5	3,00
Eutanol G/Octyldodecanol	6,00
B: Belsil CM 040/Cyclomethicone	9,00
Water	62,00
Pigments, fragrances	q.s.

Mix A and heat to 70C, form a solid phase with warm water, work in Belsil CM 040 and dilute with water.

Temperature stability: at 45C 4 weeks.

Formulation 216 AH

### Anti-Perspirant Cream

Soft white cream. Leaves no visible traces of aluminum chlorhydrate on the skin.

#### Material/CTFA-Index:

A: Cetyl Alcohol	2,50%
Stearyl Alcohol	2,50
Locron P/Aluminum Chlorhydrate	10,00
Eumulgin M8/Oleth-10 (and) Oleth-5	3,00
Eutanol G/Octyldodecanol	6,60
B: Belsil CM 040/Cyclomethicone	9,00
Belsil PDM 20/Phenylmethicone	3,00
Water	63,40
Pigments, fragrances	q.s.

Mix A and heat to 70C, mix in hot water, add B and mix well.

Temperature stability: at 45C over 10 weeks.

Formulation 217AH

### Anti-Perspirant Roll-on

Milky white, liquid.

#### Material/CTFA-Index:

A: Locron P/Aluminum Chlorhydrate	20,00%
Wacker HDK H15/Silica	1,00
B: Lamecreme KS/Glyceryl Stearate se	3,00
Belsil DM 100/Dimethicone	5,00
C: Belsil CM 020/Cyclomethicone	71,00
Pigments, fragrances	q.s.

Mix A and heat to 70-75C, mix B and melt. Mix A and B, add C, cool.

Temperature stability: at 45C 3 weeks.

Formulation 185 AH

SOURCE: Wacker Silicone: Suggested Formulations

Antiperspirant Cream O/W

	<u>%W/W</u>
I Lanette O	8.0
Eumulgin B1	1.5
Eumulgin B2	1.5
Eutanol G *	8.0
II Aluminum chlorohydrate	20.0
Water	61.0

Formula No. F12-01

Antiperspirant Cream O/W Transparent, in Gel Form

	<u>%W/W</u>
I Eumulgin B3	12.0
Cetiol HE	20.0
Paraffin oil, high viscous	5.0
II Aluminum chlorohydrate	20.0
Water	43.0

Formula No. F12-02

Perfumed Cream O/W Transparent, in Gel Form

	<u>%W/W</u>
I Eumulgin B1	2.0
Ethyl alcohol 96%	45.0
Carbopol 940	1.5
Perfume	5.0
II Triethanolamine	2.3
Water	44.2

**Preparation:**

Eumulgin B1 and the perfumed oil are dissolved in the mixture of ethyl alcohol and 40 parts water; the Carbopol 940 is stirred while being swelled in the solution. The dispersion produced is neutralized with the mixture of triethanolamine and the rest of the water.

Formula No. F13-01

Perfumed Cream O/W Transparent, in Gel Form

	<u>%W/W</u>
Cetiol HE	2.0
Ethyl alcohol 96%	20.0
Viscontran HEC 30 000 PR-3% solution	65.0
Perfume, water-soluble	5.0
Water	8.0

Formula No. F13-02

SOURCE: Henkel KGaA: Cosmetic Model Formulae

**Anti-perspirant Roll-on**  
Slightly cloudy, high viscosity.

**Material/CTFA-Index:**

A: Belsil DMC 6032/Dimethicone Copolyol Acetate	2,00%
Water	52,00
B: Ethanol/Alcohol (Cosmetic grade)	25,00
C: Locron L/Aluminum Chlorhydrate	20,00
Tylose H 4000 P/Hydroxyethylcellulose	0,5-1,0
Pigments, fragrances	Q.S.

Mix A, stir B into A, mix in C. The desired viscosity can be regulated with Tylose H 4000 P (add Tylose H 4000 P either mixed with water to A or mix at the end in the finished formulation).

Formulation 516 AH

**Anti-perspirant Roll-on**  
Cloudy, low viscosity.

**Material/CTFA-Index:**

Water	51,20%
Ethanol/Alcohol (Cosmetic grade)	12,00
Belsil DMC 6031/Dimethicone Copolyol	5,00
Wacker HDK H15/Silica	1,50
Tylose H 4000 P/Hydroxyethylcellulose	0,30
Locron L/Aluminum Chlorhydrate	30,00
Pigments, fragrances	q.s.

Mix the water and cosmetic alcohol, dissolve Belsil DMC 6031. Add HDK H15 and Tylose H 4000 P to the solution whilst stirring. Stir in the aluminum chlorhydrate.

Temperature stability: at 45C over 10 weeks.

Formulation 242 AH

**Anti-perspirant Stick**  
White firm stick with little soft rub.

**Material/CTFA-Index:**

A: Belsil CM 040/Cyclomethicone	52,50%
B: Stearyl Alcohol	24,00
Arlacel 165/Glyceryl Stearate se	1,00
Locron P/Aluminum Chlorhydrate	22,00
Pigments, fragrances	q.s.

Mix B and heat to 65C. Stir in Belsil CM 040.

Temperature stability: at 45C over 10 weeks.

Formulation 302 AH

**SOURCE: Wacker Silicone: Suggested Formulations**

Clear Antiperspirant Stick

A solid antiperspirant stick which contains a solubilized enhanced efficacy aluminum-zirconium tetrachlorohydrate GPG active in a clear base.

<u>Ingredients:</u>	<u>% by weight</u>
A. Reach AZP-908PG (30% soln.)	50.00
B. Propylene Glycol	20.70
C. PPG-3-Isosteareth-9	8.00
D. Propylene Carbonate	6.00
E. Dipropylene Glycol	4.00
F. Dibenzylidene Sorbitol	3.00
G. Isosteareth-2	3.00
H. Laureth-2 Benzoate	2.00
I. Dimethicone Copolyol	1.50
J. AMP Regular	1.80
K. Fragrance	q.s.

Procedure:

1. Add B,D,E, and I in sequence to beaker with medium agitation and heat to 100C.
2. Add F to beaker and mix with medium agitation until dissolved and the solution is clear. Lower temperature to 95C.
3. Heat A separately to 85C and add J. Mix until clear. Add to main batch.
4. Premix C, G, H, and K and heat to 85C and add to main batch slowly at low to medium speed.
5. Continue mixing and pour into casings at 80-85C.

Formulation PF-0276 suggested by Reheis, Inc.

SOURCE: Angus Chemical Co.: Angus Product Formulary

Antiperspirant Roll-on

Colourless, clear, low-viscosity.

Material/CTFA-Index:

Wacker-Belsil DMC 6038/Dimethicone Copolyol	2,00%
Water	53,00
Ethanol/Alcohol (Cosmetic grade)	25,00
Locron L/Aluminumchlorhydrat	20,00
Fragrances, pigments	q.s.

Mix all ingredients.

SOURCE: Wacker Silicone: Formulation 180 AH

Deodorant Emulsion O/W for Roll-On

	%W/W
I Cutina MD	4.0
Eumulgin B1	1.5
Eumulgin B2	1.5
Eutanol G	5.0
Bactericide	0.5
II Ethyl alcohol 96%	10.0
Carbopol 934	0.3
Triethanolamine	0.5
Henkel Glycerin 86% DAB 9	5.0
Water	71.7

**Preparation:**

The fatty substances are melted on the water bath at approx. 70C and the bactericide is dissolved. 50 parts of the water are mixed with the glycerine, heated to approx. 75 C and, stirring slowly, added to the fat phase. The Carbopol 934 is stirred while being dispersed in 15 parts of the water. After the emulsion has cooled to approx. 35C, the ethyl alcohol and the Carbopol dispersion are added, perfumed, preserved and neutralized with the triethanolamine which has been dissolved earlier in the remaining 6.1 parts of the water.

Formula NO. F21-01

Antiperspirant Emulsion O/W, Liquid (Roll-On)

	%W/W
I Lanette 16	2.0
Cutina MD	5.0
Eumulgin B1	1.5
Eumulgin B2	1.5
Cetiol V	4.0
II Aluminum chlorohydrate	10.0
Water	76.0

Formula No. F22-01

Antiperspirant Emulsion O/W (Roll-On)

	%W/W
Eutanol G	3.0
Viscontran MC 400-6% solution	30.0
Aluminum chlorohydrate	20.0
Ethyl alcohol 96%	17.0
Water	30.0

**Preparation:**

The aluminum chlorohydrate is dissolved in 30 parts water and this solution is added to the Viscontran solution. The mixture of Eutanol G and ethyl alcohol is stirred in and then homogenized.

Formula No. F22-02

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Deodorant Lotion Clear (Roll-On)

	%W/W
Hydagen DEO	2.0
Cetiol HE	3.0
Ethyl alcohol 96%	25.0
Viscontran HEC 30,000 PR 1% solution	40.0
Eumulgin RO 40	1.2
Perfume	0.4
Water	28.4
Formula No. F51-01	

Deodorant Antiperspirant Lotion, Clear (Roll-On)

	%W/W
Hydagen DEO	1.5
Locron P	30.0
Cetiol HE	2.0
Ethyl alcohol 96%	30.0
Viscontran HEC 30,000 PR 1% solution	20.0
Perfume	0.2
Eumulgin RO 40	1.2
Water	15.1
Formula No. F51-02	

Antiperspirant Lotion

	%W/W
Cetiol HE	6.0
Ethyl alcohol 96%	20.0
Aluminum chlorohydrate-50% solution	30.0
Henkel Glycerin 86% DAB 9	3.0
Water	41.0

Note: Such a lotion can be used, for example, with a pump atomizer. The spray behavior depends on the type of atomizer. The formulation must then be changed by increasing the alcohol proportion.

Formula No. F52-01

Antiperspirant Lotion (Without Alcohol)

	%W/W
Cetiol HE	5.0
Eumulgin 286	2.0
Aluminum chlorohydrate	20.0
Henkel Glycerin 86% DAB 9	2.0
Water	71.0
Formula No. F52-02	

SOURCE: Henkel KGaA: Cosmetic Model Formulae



Deodorant Spray Aerosol-Packed

	%W/W
Eutanol G	10.0
Bactericide	0.1
Perfume	1.0
Ethyl or Isopropyl Alcohol	88.9

Filling: 50 parts active ingredient concentrate  
 50 parts propellant 12/114 (40:60)  
 Formula No. F71-01

Deodorant Spray Aerosol-Packed

	%W/W
I Hydagen DEO	1.5
Ethyl alcohol 96%	28.2
Perfume	0.3

II Propellant gas Frigen 11/12 (40:60) 70.0  
 Formula No. 71-02

Antiperspirant Spray Aerosol-Packed

	%W/W
Eutanol G	50.0
Locron P	35.0
Aerosil 200	5.0
Perfume	10.0

Filling: 10 parts solution  
 90 parts propellant 11/12 (65:35)  
 Formula No. 72-01

Deodorant, Antiperspirant Spray, Aerosol-Packed

	%W/W
Hydagen DEO	2.0
Myritol 318	2.0
Locron P	3.0
Aerosil 200	0.1
Perfume	0.3

Filling: 8% (weight percentage) active ingredient solution  
 92% (weight percentage) propellant Frigen 11/12 (35/65)  
 Note: The product must be shaken before use.  
 Formula No. F72-02

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Deodorant Stick

	%W/W
Lanette O	3.0
Eutanol G	27.0
Comperlan 100	3.0
Siebert Stearin L4	8.0
Perfume	2.0
Bactericide	0.2
Ethyl alcohol 96%	51.8
1,2-propylene glycol	2.0
Sodium hydroxide solution 38%	3.0

Preparation:

Lanette O, Eutanol G, Comperlan 100, Siebert Stearin L4 and the bactericide are melted together on the water bath at approx. 70C with most of the ethyl alcohol. Propylene glycol and the remaining part of the alcohol are mixed together with the sodium hydroxide solution, also heated to 70C and stirred into the alcoholic fat melt. The compound is then perfumed and cast in moulds. It solidifies in a few minutes and can be taken out of the mould before it cools down completely. It is advisable to work with a certain excess of alcohol. In small batches, this is about 10%, whilst in larger ones, correspondingly less. Because of the risk of evaporation, the finished stick must be packed in a sufficiently tight container.

Note: Max. pH 11

Formula No. F41-01

Deodorant Stick Without Alcohol

	%W/W
Siebert Stearin L2SM	8.0
Comperlan 100	3.0
Lanette 22	8.0
Irgasan DP 300	0.5
1,2-propylene glycol	65.3
Sodium hydroxide sol. 10%	15.2

Formula No. F41-04

Deodorant Stick Without Alcohol

	%W/W
Siebert Stearin L2SM	10.0
Comperlan 100	4.0
Lanette 22	10.0
Irgasan DP 300	0.5
1,2-Propylene glycol	56.5
Sodium hydroxide sol. 10%	19.0

Formula No. F41-05

Preparation for Formulas F41-04 and F41-05:

Siebert Stearin L2SM, Comperlan 100, Lanette 22, Irgasan DP 300 are dissolved in 40 parts propylene glycol at 70C. The sodium hydroxide solution is also heated to 70C with the rest of the propylene glycol and stirred into the melt. It is poured into moulds at 65C.

SOURCE: Henkel KGaA: Cosmetic Model Formulae

**Deodorant Stick**

Translucent stick with soft rub.

**Material/CTFA-Index:**

Sodium Stearate	6,00%
Ethanol 96 %ig/Alcohol (cosmetic grade)	65,00
Propylene Glycol	24,80
Belsil CM 040/Cyclomethicone	3,00
Pigments, preservatives, fragrances	q.s.

Mix all components and heat to 60-70C, until all the sodium stearate has melted. Fill at 60C.

Temperature stability: at 45C over 10 weeks.

Formulation 186 AH

**Deodorant Stick**

Firm, slightly yellow stick with soft rub.

**Material/CTFA-Index:**

Lanolin Acid	50,00%
Belsil SDM 6022/Dimethicone (and) Stearoxy Dimethylsilane (and) Stearoxy Dimethyldisiloxane	36,00
Isopropyl Myristate	5,00
Belsil DM 350/Dimethicone	4,00
Belsil CM 040/Cyclomethicone	5,00
Preservatives, pigments, fragrances	q.s.

Melt all components together. Fill while hot.

Temperature stability: at 45C over 10 weeks.

Formulation 279 AH

**Deodorant Stick**

Firm, slightly yellow stick with little rub.

**Material/CTFA Index**

A: Lanolin Acid	60,00%
Belsil SDM 6022/Dimethicone (and) Stearoxy Dimethylsilane (and) Stearoxy Dimethyldisiloxane	30,00
Belsil DM 35/Dimethicone	5,00
B: Belsil CM 040/Cyclomethicone	5,00

Melt A, mix in B, fill while hot.

Temperature stability: at 45C over 10 weeks.

Formulation 357 AH

SOURCE: Wacker Silicone: Suggested Formulations

Deodorant Stick Formulation

<u>Ingredient:</u>	<u>Weight%</u>
Propylene Glycol	67.2
Water	19.2
Phenoxyde STA-100 (Steareth-100)	4.4
Sodium Stearate	4.1
Silwax WS-L	4.0
Phenoxyde STA-2 (Steareth-2)	0.6
Triethanolamine	0.5

Procedure:

1. Add water, propylene glycol and heat to 75C.
2. Add other ingredients in order shown under agitation.
3. Cool to 60C.
4. Add fragrance and color as desired.

Silwax WS-L is a patented silicone compound which lowers the tack of the stick and provides a silicone feel. It does not affect the clarity.

Formula L-2418A

Deodorant Stick Formulation

<u>Ingredient:</u>	<u>Weight%</u>
Propylene Glycol	67.2
Water	19.2
Phenoxyde STA-100 (Steareth-100)	4.4
Sodium Stearate	4.1
Silwax WD-F	4.0
Phenoxyde STA-2 (Steareth-2)	0.6
Triethanolamine	0.5

Procedure:

1. Add water, propylene glycol and heat to 75C.
2. Add other ingredients in order shown under agitation.
3. Cool to 60C.
4. Add fragrance and color as desired.

Silwax WD-F is a patented fluorine containing silicone compound which lowers the tack of the stick and provides a unique non-sticky feel. The formulation using Silwax WD-F is not clear.

Formula L-2375B

SOURCE: Phoenix Chemical, Inc.: Suggested Formulations

# **Section II**

## **Baby Products**

**Baby Cream**  
**Soft**

**Recipe:**

A	Hostacerin W0	8.00%
	Polyglyceryl-2 Sesquiisostearate (and) Beeswax (and)	
	Microcrystalline Wax (and) Mineral Oil (and)	
	Magnesium Stearate (and) Aluminum Stearate	
	Permulgin 4200	2.00%
	Microcrystalline Wax	
	Amerlate W	2.00%
	Isopropyl Lanolate	
	Vaseline	10.00%
	Mineral oil, high viscosity	15.00%
	Isopropyl palmitate	5.00%
	Calendula oil	2.00%
	Antioxidant	q.s.
B	Zinc oxide	10.00%
	Talc	5.00%
C	Allantoin	0.20%
	Aquamollin BC pdr.h.c.	0.10%
	Ethylendiamine Tetraacetic Acid-Sodium Salt	
	Citric acid (10% in water)	0.25%
	D-Panthenol	0.60%
	Water	39.65%
	Preservative	q.s.
D	Perfume	0.20%

**Procedure:**

- I Melt A at 80C, then add B.    II Heat C to 80C.  
 III Stir II into I.    IV Stir until cool.  
 V At 35C add D to IV.

**SOURCE: Hoechst: Guide Formulations for Cosmetics & Toiletries:  
 Formula A VI/5804**

**Baby Cream**

White, soft cream. Slightly greasy, but well absorbed.  
Water-proof.

**Material/CTFA-Index:**

A: Hostacerin WO/Polyglyceryl-2 Sesquiossearate (and)	
Beeswax (and) Mineral Oil (and) Magnesium Stearate	
(and) Aluminum Stearate	10.00%
Lunacera M/Microwax	1.00
Mineral Oil (high viscosity)	10.00
Isopropyl Myristate	7.00
B: Glycerine	3.00
Water	61.60
C: Belsil CM 1000/Cyclomethicone (and) Dimethiconol	5.00
Preservatives, perfume, pigments	q.s.

W/O Cream

Melt A at approx. 80C, heat B to 80C. Stir A into B with good agitation. Add C at approx. 45C.

Temperature stability: at 45C more than 10 weeks.

Formulation 809 AH

**Baby Lotion**

High-viscosity lotion, easily spread.

**Material/CTFA-Index:**

A: Wacker-Belsil DM 350/Dimethicone	35.00
Crodawachs GP 200/Stearylalcohol (a.) PEG Stearate	4.00
B: Water	55.00
C: Zinc Oxide	6.00
Preservative, fragrances, pigments	q.s.

Heat both A and B to 60-65C, stir B into A, and then add C.

Formulation 939 AH

SOURCE: Wacker Silicone: Formulation 939 AH

**Baby Shampoo**

<u>Ingredients:</u>	<u>%</u>
Phase A:	
H <sub>2</sub> O, Deionized	49.40
Sodium Lauroamphoacetate & Sodium Trideceth Sulfate	25.00
Sodium Laureth-3 Sulfate	10.00
Hetaine CLA (Canolamidopropyl Betaine)	4.00
Hetsorb L-80-72% (PEG-80 Sorbitan Laurate)	10.00
PEG-150 Distearate	0.90
Phase B:	
Quaternium-15	0.20
Phase C:	
Citric acid	0.50

**Specifications:**

pH: 6.90

Viscosity #3/12: 2000 cps

**Procedure:**

- 1) In a stainless steel kettle equipped with a Lightnin' type mixer, combine Phase A. Heat to 70C while mixing until uniform.
  - 2) Cool to 45C while mixing; add Phase B.
  - 3) Adjust to desired pH with Phase C.
- Formula HS 92-61-3

**Baby Bath**

<u>Ingredients:</u>	<u>%</u>
H <sub>2</sub> O, Deionized	58.8
PEG-80 Glyceryl Cocoate	14.0
Sodium Lauryl Sulfate	12.0
PEG-30 Glyceryl Cocoate	8.0
Hetaine CLA (Canolamidopropyl Betaine)	6.0
Aloe Vera Gel	0.5
Methyl Paraben	0.25
Propyl Paraben	0.15
Imidazolidinyl Urea	0.30

**Specifications:**

pH: 6.80

Viscosity #3/12: 2300

**Procedure:**

In a stainless steel kettle, combine all ingredients, except imidazolidinyl urea, and heat to 70C while mixing until uniform. Cool to 30C and add remaining ingredient. Mix well.

Formula HB 93-92

**SOURCE:** Heterene, Inc.: Suggested Formulations



### Bubble Bath for Babies and Children, Clear, Liquid

	%W/W
Texapon SBN	60.0
Cremogen camomile spec.	2.0
Sodium chloride	2.0
Water	36.0

Note: WAS 18%, medium viscous  
Formula No. R62-01

### Bubble Bath for Babies and Children, Clear, Liquid

	%W/W
Texapon ASV	50.0
Cetiol HE	5.0
Cremogen, camomile spec.	3.0
Sodium chloride	3.0
Perfume, water-soluble	1.0
Water	38.0

Note: WAS 15%, medium viscous  
Formula No. R62-03

### Bubble Bath for Babies and Children, Liquid

	%W/W
Dehyton AB30	40.0
Lamepon S	20.0
Nutrilan L	2.0
Comperlan KM	3.0
Perfume, water-soluble	1.0
Water	34.0

Note: WAS 19%, low viscous  
Formula No. R62-05

### Care Bath for Babies and Children

	%W/W
Texapon K14S special	22.0
Comperlan LS	3.0
Sodium chloride	0.7
Cremogen camomile special	3.0
Cetiol HE	2.0
Citric acid, 10% sol.	0.3
Water	69.0

Note: WAS 9%  
Formula No. R62-07

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Bubble Bath for Babies and Children, Pearly

	<u>%W/W</u>
Texapon SBN	60.0
Cutina AGS	3.0
Cremogen camomile spec.	2.5
Sodium chloride	2.5
Water	32.0

Note: WAS 18%, medium viscous  
Formula No. R63-01

Care Bath for Babies and Children, Pearly

	<u>%W/W</u>
Texapon K14S special	26.0
Euperlan PK 771	10.0
Comperlan KD	3.0
Sodium chloride	1.0
Cetiol HE	3.0
Cremogen camomile, spec. new	3.0
Citric acid 10% sol.	0.4
Water	53.6

Note: WAS 14%  
Formula No. R63-03

Care Bath for Babies and Children, Pearly

	<u>%W/W</u>
Texapon ASV	40.0
Dehyton AB 30	20.0
Euperlan PK 810	3.0
Water	37.0

Note: WAS 19%  
Formula No. R63-05

Care Bath for Babies and Children, Pearly

	<u>%W/W</u>
Texapon ASV	40.0
Dehyton K	20.0
Euperlan PK 810	3.0
Comperlan LS	2.0
Citric acid 10% sol.	4.0
Water	31.0

Note: WAS 21%  
Formula No. R63-06

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Cream for Babies and Children O/W

	%W/W
I Cutina MD	15.0
Eumulgin B1	1.5
Eumulgin B2	1.5
Cetiol LC	10.0
Myritol 318	10.0
Calendula oil CLR	4.0
II Aluminum hydroxyallantoinate	0.2
Water	54.8
III Cremogen witch hazel extract	3.0
Formula No. R11-01	

Cream for Babies and Children O/W

	%W/W
I Dehymuls E	7.0
Cetiol V	10.0
Vaseline, white	15.0
Wool fat, anhydrous	5.0
Talc	15.0
Zinc oxide	10.0
II Water	38.0
Formula No. R11-03	

Cream for Babies and Children, Anhydrous

	%W/W
Dehymuls K	30.0
Cetiol SN	10.0
Myritol 318	10.0
Vaseline, white	20.0
Ozokerite	3.0
Vitamin F glycerine ester CLR	2.0
Rice starch	10.0
Kaolin	10.0
Zinc oxide	5.0
Formula No. R11-05	

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Cream for Babies and Children W/O

	<u>%W/W</u>
I Dehymuls F	8.0
Cetiol V	8.0
Myritol 318	5.0
Vaseline, white	15.0
Calendula oil CLR	3.0
II Allantoin	0.2
Henkel Glycerin 86% DAB 9	5.0
Magnesium sulfate-7-hydrate	0.5
Perfume	0.3
Water	55.0

Formula No. R11-07

Vulnerary Cream for Children W/O

	<u>W/W</u>
I Dehymuls F	10.0
Novata AB	5.0
Cetiol V	5.0
Paraffin oil, low viscous	5.0
Vaseline, white	23.0
Microwax HP 67	3.0
II Aluminum stearate	0.5
Titanium dioxide	15.0
Kaolin	9.0
Bismuth subgallate	1.0
Allantoin	0.2
Wheat starch	10.0
III Water	13.3

Formula No. R11-08

Baby Cream O/W

	<u>%W/W</u>
I Cutina E24	5.0
Cutina MD	10.0
Lanette O	2.0
Eutanol G	6.0
Myritol 318	6.0
Cetiol 868	10.0
Calendula oil CLR	3.0
Cetiol SN	5.0
II Allantoin	0.3
Henkel Glycerin 86% DAB 9	5.0
Water	47.7

Formula No. R11-09

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Emulsion for Babies and Children O/W

	<u>%W/W</u>
I Cutina MD	7.0
Eumulgin B1	1.5
Eumulgin B2	1.5
Eutanol G	10.0
Calendula oil	3.0
Paraffin oil, high viscous	6.0
Vitamin F glycerine ester CLR	3.0
Cetiol SN	5.0
II 1,2-propylene glycol	5.0
Water	58.0
Formula No. R21-01	

Oil for Babies and Children

	<u>%W/W</u>
Eutanol G	30.0
Isopropyl palmitate	10.0
Myritol 318	10.0
Calendula oil CLR	3.0
Carrot oil CLR	1.0
Paraffin oil, high viscous	46.0
Formula No. R31-01	

Oil for Babies and Children

	<u>%W/W</u>
Cetiol SN	40.0
Myritol 318	56.0
Calendula oil CLR	4.0
Formula No. R31-02	

Vulnerary Stick for Babies and Children

	<u>Parts</u>
Cutina LM	60.0
Myritol 318	15.0
Zinc oxide	7.5
Talc	7.5
Bismuth subgallate	5.0
Formula No. R41-02	

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Shampoo for Babies and Children

	<u>%W/W</u>
Texapon ASV	50.0
Water	50.0
Note: WAS 15%, low viscous	
Formula No. R61-01	

Shampoo for Babies and Children

	<u>%W/W</u>
Texapon SBN	50.0
Sodium chloride	3.0
Water	47.0
Note: WAS 16%, medium viscous	
Formula No. R61-03	

Shampoo for Babies and Children

	<u>%W/W</u>
Texapon N25/N40	30.0
Dehyton K	10.0
Sodium chloride	1.5
Water	58.5
Note: WAS 11%, viscous	
Formula No. R61-05	

Shampoo for Children, with Ampholyte, Pearly

	<u>%W/W</u>
Texapon ASV	60.0
Dehyton K	5.0
Euperlan PK 771	5.0
Sodium chloride	2.5
Water	27.5
Note: WAS 21%, high viscous	
Formula No. R61-07	

Shampoo for Babies and Children, Pearly

	<u>%W/W</u>
Texapon ASV	40.0
Euperlan PK 810	4.0
Comperlan F	2.0
Sodium chloride	2.0
Water	52.0
Note: WAS 15%	
Formula No. R61-09	

SOURCE: Henkel KGaA: Cosmetic Model Formulae

**Shampoo for Babies and Children, Clear**

	%W/W
Texapon ASV 70 special	10.0
Texapon N70	10.0
Comperlan OD	1.0
Sodium chloride	4.0
Lecithin, water disp.	0.5
Water	74.5

Note: Low viscous, WAS 15%

Formula No. R61-19

**Shampoo for Babies and Children, with Vitamin**

	%W/W
Comperlan OD	2.0
Vitamin E/Covitol 1100	0.5
Perfume	0.2
Texapon ASV	30.0
Dehyton G-SF	5.5
Sodium chloride	3.0
Water	58.8

Note: WAS 13%

Preparation: Contents are mixed in the order shown above without heating.

Formula No. R61-21

**Shampoo for Babies and Children, with Vitamin E**

	%W/W
Comperlan KD	1.5
Vitamin E/Covitol 1100	0.5
Perfume	0.2
Texapon K14 S special	30.0
Dehyton G	10.0
Sodium chloride	2.0
Water	55.8

Note: WAS 13%

Preparation: Contents are mixed in the order shown above without heating.

Formula No. R61-23

**Baby Shampoo, Pearly**

	%W/W
Texapon SBN	39.3
Lamepon S	18.8
Nutrilan L	5.0
Monomuls 90-L 12	1.0
Lamesoft 156	5.0
Hexaplant Richter	1.0
Perfume	0.3
Sodium chloride	1.2
Water	28.4

Note: Medium viscous, WAS 17%

Preparation: Ingredients are mixed in the order shown above.

Monomuls 90-L 12 is easier to work in when heated.

Formula No. R61-25

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Shampoo for Babies and Children, Pearly

	%W/W
Texapon ASV	40.0
Euperlan PK 810	2.0
Comperlan F	2.0
Sodium chloride	3.0
Water	53.0
Note: WAS 14%	
Formula No. R61-10	

Shampoo for Babies and Children, with Ampholyte, Pearly

	%W/W
Texapon ASV	35.0
Dehyton G	10.0
Comperlan KD	1.0
Euperlan PK 771	2.0
Sodium chloride	1.5
Water	50.0
Note: WAS 15%	
Formula No. R61-12	

Shampoo for Babies and Children, Clear

	%W/W
Texapon K14S special	25.0
Comperlan KD	2.0
Dehyton G	10.0
Sodium chloride	2.5
Water	60.5
Note: WAS 12%	
Formula No. R61-14	

Shampoo for Babies and Children

	%W/W
Texapon ASV	50.0
Comperlan OD	2.0
Sodium chloride	3.0
Water	45.0
Note: WAS 17%	
Formula No. R61-16	

Shampoo for Babies and Children, Clear

	%W/W
Texapon ASV 70 special	10.0
Dehyton K	10.0
Comperlan OD	2.0
Sodium chloride	2.5
Water	75.5
Note: Viscous, WAS 12%	
Formula No. R61-18	

SOURCE: Henkel KGaA: Cosmetic Model Formulae



## **Section III**

# **Bath and Shower Products**

Bath Oil Emulsion

	%W/W
I Eumulgin O5	1.5
Eumulgin O10	1.5
Rilanit GMO	1.0
Eutanol G	50.0
Paraffin oil	15.0
Perfume	2.0
II Aerosil 200	1.5
Water	27.5

Formula No. L68-01

Bath Milk Emulsion

	%W/W
I Cutina MD	6.0
Siegert Stearin L2SM	4.0
Eumulgin B1	3.0
Eumulgin B2	3.0
Isopropyl Myristate	8.0
Eutanol G	4.0
Vitamin oil Biocorno	4.0
Paraffin oil	8.0
II Milk powder	1.0
Triethanolamine	0.4
Water	58.6

Formula No. L68-02

Bath Oil

	%W/W
Eumulgin 286 DEO	20.0
Turkish red oil	10.0
Ethyl alcohol 96%	20.0
Perfume	30.0
Water	20.0

Note: This formula belongs to the bath oil category although no refatting additives are used here. Such a formula, which is primarily intended for perfuming the body, should be designated rather as a scent bath or perfumed bath.

This bath oil dissolves completely in water.

Formula L67-12

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Bath Oil, Liquid

	<u>%W/W</u>
Eumulgin O5	10.0
Cetiol A	40.0
Comperlan KD	10.0
Myritol 318	10.0
Paraffin oil	25.0
Perfume	5.0

Formula No. K67-01

Bath Oil, Liquid

	<u>%W/W</u>
Dehydol LS2 DEO	10.0
Aethoxal B	40.0
Cetiol A	30.0
Myritol 318	15.0
Perfume	5.0

Formula No. L67-03

Bath Oil, Liquid

	<u>%W/W</u>
Dehydol LS2 DEO	10.0
Cetiol HE	85.0
Perfume	5.0

Formula No. L67-05

Bath Oil, Liquid

	<u>%W/W</u>
Aethoxal B	90.0
Perfume	10.0

Formula No. L67-08

Bath Oil, Spreading

	<u>%W/W</u>
Dehydol LS2 DEO	5.0
Myritol 318	40.0
Paraffin oil, high viscous	50.0
Perfume	5.0

Formula No. L67-10

SOURCE: Henkel KGaA: Cosmetic Model Formulae

**Bubble-Bath**

With pearl lustre effect, 18.2% active ingredient

**Recipe:**

A	Hostapon CT paste	8.00%
	Sodium Methyl Cocoyl Taurate	
B	Water	20.00%
C	Genapol LRO liquid	40.00%
	Sodium Laureth Sulfate	
	Genapol AMG	10.00%
	Magnesium-PEG-3 Cocamide Sulfate	
	Genapol PGM liquid	4.00%
	Sodium Laureth Sulfate (and) Glycol Distearate (and) Cocamide MEA	
	Gelita Sol C	3.00%
	Hydrolyzed Collagen	
	Perfume	0.50%
	Water	10.70%
	Dyestuff solution	q.s.
	Preservative	q.s.
	Genapol L-3	2.00%
	Laureth-3	
D	Sodium chloride	1.80%

**Procedure:**

- I Dissolve A in warmed B.
- II One after another the components of C are added to I.
- III If necessary adjust the pH.
- IV Finally adjust the viscosity with D.

Formulation A I/2009

**Bubble-Bath**

Low price quality, clear, 10.0% active ingredient

**Recipe:**

A	Genapol LRO liquid	25.00%
	Sodium Laureth Sulfate	
B	Hostapur SAS 60	5.00%
	Sodium C14-17 Sec. Alkyl Sulfonate	
	Perfume	0.50%
	Water	67.50%
	Dyestuff solution	q.s.
	Preservative	q.s.
C	Sodium chloride	2.00%

**Procedure:**

- I One after another the components of B are added to A.
  - II If necessary adjust the pH.
  - III Finally adjust the viscosity with C.
- Formulation A I/2010

SOURCE: Hoechst; Guide Formulations for Cosmetics &amp; Toiletries

Bubble-Bath

With pearl lustre effect, 22.0% active ingredient

Recipe:

A	Genapol LRO liquid	60.00%
	Sodium Laureth Sulfate	
B	Genapol AMG	8.00%
	Magnesium-PEG-3 Cocamide Sulfate	
	Perfume	1.50%
	Cetiol HE	5.00%
	PEG-7 Glyceryl Cocoate	
	Genapol PGL	5.00%
	Glycol Distearate (and) Cocamide MEA (and)	
	PPG-4 Deceth-4	
	Water	11.50%
	Dyestuff solution	q.s.
	Preservative	q.s.
	Genagen CAB	6.00%
	Cocamidopropyl Betaine	
	Genapol L-3	1.00%
	Laureth-3	
C	Sodium chloride	2.00%

Procedure:

- I One after another the components of B are added to A.  
 II If necessary adjust the pH.  
 III Finally adjust the viscosity with C.

Formulation A I/3025

Special Bath

Clear, low foaming

Recipe:

A	Genagen CA-050	30.00%
	PEG-5 Cocamide	
B	Rosmarin bath	5.00%
	Isopropyl palmitate	5.00%
	Water	50.00%
	Genapol LRO liquid	10.00%
	Sodium Laureth Sulfate	

Procedure:

- One after another the components of B are added to A.

Formulation A I/7017

SOURCE: Hoechst: Guide Formulations for Cosmetics &amp; Toiletries

Bubble Bath, Clear

	%W/W
Texapon N25	30.0
Cetiol HE	2.0
Comperlan KD	2.0
Sodium chloride	3.0
Perfume, water soluble	1.0
Water	62.0
Note: High viscous, WAS 10%	
Formula No. L61-01	

Bubble Bath, Clear, Liquid with Protein

	%W/W
Texapon N40	30.0
Lamepon S	20.0
Comperlan KD	1.0
Nutrilan L	3.0
Sodium chloride	2.0
Perfume, water-soluble	2.0
Water	42.0
Note: High viscous, WAS 15%	
Formula No. L61-03	

Bubble Bath, Clear, Liquid

	%W/W
Texapon N40	30.0
Lamepon S	20.0
Sodium chloride	1.5
Perfume, water-soluble	2.0
Water	46.5
Note: High viscous, WAS 16%	
Formula No. L61-04	

Bubble Bath, Clear, Liquid

	%W/W
Texapon MLS	60.0
Dehyton AB 30	10.0
Comperlan KD	4.0
Perfume, water-soluble	3.0
Water	23.0
Note: The addition of Dehyton AB 30 gives this formula a slight deodorizing effect.	
Medium viscous, WAS 27%	

SOURCE: Henkel KGaA: Cosmetic Model Formulae

**Bubble Bath, Clear, Especially Skin Compatible**

	<u>%W/W</u>
Texapon K14S special	79.0
Comperlan LS	3.0
Cetiol HE	5.0
Perfume	2.0
Citric acid 10% solution	0.3
Water	10.7
Note: WAS 25%	
Formula L61-31	

**Bubble Bath, Clear, with Ethereal Oil**

	<u>%W/W</u>
Texapon N40	50.0
Eumulgin SML 20	5.0
Eucalyptus oil	2.0
Pine needle oil	2.0
Water	41.0
Note: WAS 19%	
The quantity of emulsifier must be varied in accordance with the type of ethereal oil used.	
Formula L61-33	

**Bubble Bath, Clear, Especially Skin Compatible**

	<u>%W/W</u>
Texapon K14S special	36.0
Comperlan LS	3.0
Sodium chloride	0.7
Aethoxal B	2.0
Perfume	1.0
Citric acid 10% solution	0.4
Water	56.9
Note: 13% WAS	
Formula No. L61-35	

**Bubble Bath, Clear, Especially Skin Compatible**

	<u>%W/W</u>
Texapon K14S special	57.0
Comperlan LS	3.0
Sodium chloride	0.4
Aethoxal B	2.0
Perfume	1.0
Citric acid 10% solution	0.4
Water	36.2
Note: WAS 19%	
Formula No. L61-37	

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Bubble Bath, Clear, Liquid

	<u>%W/W</u>
Texapon IES	50.0
Comperlan LS	4.0
Perfume, water-soluble	3.0
Water	43.0

Note: High viscous, WAS 34%

Formula No. L61-08

Bubble Bath, Clear, Liquid

	<u>%W/W</u>
Sulfofon 101 Spec.	60.0
Comperlan KD	3.0
Perfume, water-soluble	3.0
Water	34.0

Note: Low viscous, WAS 22%

Formula No. L61-11

Vitamin Bubble Bath, Clear, Liquid

	<u>%W/W</u>
Texapon N25	90.0
Comperlan KM	3.0
Soluvit Richter	4.0
Perfume	3.0

Note: High viscous, WAS 26%

Formula No. L61-14

Bubble Bath, Clear, Liquid

	<u>%W/W</u>
Texapon N40	60.0
Aethoxal B	20.0
Isopropyl Myristate	10.0
Perfume	2.0
Water	8.0

Note: Medium viscous, WAS 17%

Formula No. L61-15

SOURCE: Henkel KGaA: Cosmetic Model Formulae



Bubble Bath, Clear, Liquid

	<u>%W/W</u>
Texapon MLS	60.0
Comperlan LS	3.0
Cetiol HE	10.0
Perfume	3.0
Sodium chloride	2.0
Water	22.0

Note: Medium viscous, WAS 23%  
Formula No. L61-17

Algae Bubble Bath, Clear, Liquid

	<u>%W/W</u>
Texapon N40	70.0
Cetiol HE	10.0
Comperlan KD	3.0
Extrapon algae super	3.0
Perfume Brise bleu	3.0
Water	11.0

Note: Medium viscous, WAS 23%  
Formula No. L61-19

Bubble Bath

	<u>%W/W</u>
Texapon N25	15.0
Cetiol HE	2.0
Viscontran HEC 30 000 PR-2% solution	60.0
Perfume, water-soluble	1.0
Water	22.0

Note: High viscous bubble bath with an extremely low WAS content  
of approx. 4%  
Formula No. L61-21

Bubble Bath

	<u>%W/W</u>
Texapon N25	20.0
Cetiol HE	2.0
Viscontran HEC 30 000 PR-2% solution	77.0
Perfume, water-soluble	1.0

Note: High viscous bubble bath having a low WAS content of  
approx. 6%  
Formula No. L61-22

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Bubble Bath, Clear, in Gel Form

	%W/W
Texapon WW 99	10.0
Texapon N40	40.0
Perfume, water-soluble	2.0
Water	48.0
Note: WAS 21%	
Formula No. L61-24	

Bubble Bath, Clear, in Gel Form

	%W/W
Texapon N40	50.0
Dehyton AB30	20.0
Pine perfume	4.0
Water	26.0

Note: The perfume specified is suitable for this bubble bath in gel form. Other perfumes to be used must be checked in particular with regard to their influence on the viscosity of the gel preparation. WAS20%  
Vigorous stirring should be avoided to prevent air pockets forming

Bubble Bath, Opaque, in Gel Form

	%W/W
Texapon N70	50.0
Texapon TH	30.0
Comperlan LS	3.0
Cetiol HE	5.0
Sodium chloride	3.0
Coniflor perfume	2.0
Water	7.0

Note: The perfume specified is suitable for this bubble bath in gel form. Other perfumes to be used must be checked in particular with regard to their influence on the viscosity of the gel preparation. WAS 53%  
Formula No. L61-27

Bubble Bath, Cloudy, Liquid

	%W/W
Texapon N 40	50.0
Comperlan KD	3.0
Antara 430	1.0
Water	46.0

Note: Medium viscous, WAS 17%  
Formula No. L61-29

SOURCE: Henkel KGaA: Cosmetic Model Formulae

### Bubble Bath Oil for Babies and Children

	<u>%W/W</u>
Texapon WW 99	75.0
Eutanol G	23.0
Perfume	2.0
Note: WAS 75%	
Formula No. R64-01	

### Bubble Bath Oil for Babies and Children

	<u>%W/W</u>
Texapon WW 99	60.0
Cetiol HE	38.0
Perfume	2.0
Note: WAS 60%	
Formula No. R64-02	

### Bath Oil for Babies and Children

	<u>%W/W</u>
Dehydol LS2 DEO	10.0
Aethoxal B	40.0
Cetiol A	30.0
Myritol 318	15.0
Perfume	5.0
Formula No. R65-01	

### Bath Oil for Babies and Children

	<u>%W/W</u>
Dehydol LS2 DEO	10.0
Eutanol G	20.0
Isopropyl myristate or palmitate	25.0
Myritol 318	40.0
Perfume	5.0
Note: It is advisable to use perfume oils which have a good compatibility with the mucous membranes.	
Formula No. R65-02	

### Powder for Babies and Children

	<u>%W/W</u>
Lanette O	2.0
Eutanol G	2.0
Zinc stearate	5.0
Rice starch	51.0
Kaolin	20.0
Talc	20.0
Note: Mix all ingredients, then grind and sift them mechanically to obtain fine particles.	
Formula No. R81-01	

SOURCE: Henkel KGaA: Cosmetic Model Formulae

**Bubble Bath, Pearly Liquid**

	<u>%W/W</u>
Texapon N70	30.0
Euperlan PK771	15.0
Sodium chloride	4.0
Perfume	1.0
Water	50.0

Note: High viscous, WAS 25%

Preparation: Sodium chloride must be dissolved in the smallest quantity of water possible to produce a saturated saline solution. The solution is then stirred into the undiluted Texapon N70 and stirred until the mixture has a low viscosity. The rest of the water, Euperlan PK771 and the perfume are then added.

Formula No. L64-01

**Bubble Bath, Pearly Liquid**

	<u>%W/W</u>
Texapon N40	50.0
Euperlan PK 771	20.0
Perfume	2.0
Water	28.0

Note: High viscous, WAS 19%

Formula L64-04

**Bubble Bath, Pearly Liquid**

	<u>%W/W</u>
Texapon N40	30.0
Texapon SG	20.0
Cetiol HE	6.0
Comperlan KD	3.0
Perfume	1.0
Water	40.0

Note: High viscous, WAS 16%

Formula No. L64-06

**Bubble Bath with Whey Additive, Pearly**

	<u>%W/W</u>
Texapon N25	47.1
Lamepon S-TR	22.0
Sweet whey powder	10.0
Lamesoft 156	5.0
Perfume	0.3
Sodium chloride	0.6
Water	15.0

Note: Viscous, WAS 22%

Preparation: The sweet whey powder is suspended in water and then added to the Texapon N25, Lamepon S-TR, perfume mixture. Finally, Lamesoft 156 and sodium chloride are added.

Formula No. L64-10

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Bubble Bath in Powder Form

	<u>%W/W</u>
Texapon Z Highly Conc. Powder or Texapon K 12	50.0
Comperlan 100	2.0
Fillings:	
Sodium chloride	38.0
Tartaric acid or citric acid	10.0

Note: WAS 47%

Formula No. L81-01

Bubble Bath in Tablet Form with Formation of Carbonic Acid

	<u>%W/W</u>
Texapon Z Highly Conc. Powder	25.0
Tartaric acid	32.0
Sodium bicarbonate	32.0
Uranin	0.1
Magnesium stearate	0.9
Dry perfume	10.0

Note: WAS 22%

Formula No. L82-01

Bubble Bath in Tablet Form with Formation of Carbonic Acid

	<u>%W/W</u>
Texapon Z Highly Conc. Powder	10.0
Tartaric acid	20.5
Sodium bicarbonate	32.0
Sodium sulfate	27.0
Uranin	0.1
Magnesium stearate	0.4
Dry perfume	10.0

Note: WAS 9%

Preparation: Tartaric acid, sodium bicarbonate and sodium sulfate, part of which is mixed with the dry perfume, are passed through a 1 mm mesh sieve and mixed with Texapon Highly Conc. Powder. The uranin is mixed thoroughly with the magnesium stearate in the mortar and finally added to the above powder mixture. The powder can then be compressed.

Formula No. L82-02

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Alpha Hydroxy Acid Lotion

Rich emulsion containing alpha hydroxy acid to gently exfoliate and rejuvenate the skin.

<u>Ingredients:</u>	<u>%W/W</u>	<u>Function</u>
1. Grillocoese PS (Methyl Glucose Sesquistearate)	3.00	Emulsifier
2. Behenyl Alcohol (Lanette 22)	3.00	Thickener
3. Mineral Oil 9NF	7.50	Emollient
4. Octyl Octanoate (Tegosoft EE)	7.50	Emollient
5. Sodium Cetearyl Sulfate (Lanette E)	0.10	Emulsifier, Cleaning
6. Glycerine	3.00	Humectant
7. Xanthan Gum (Keltrol CG-T)	0.40	Thickener
8. Distilled/Deionized Water	64.00	----
9. Patlac LA (Lactic Acid-88%)	5.60	Hydroxy Acid
10. Sodium Hydroxide (20% Soln.)	5.00	pH Adjuster
11. Glydant	q.s.	Preservative
12. Fragrance-Nature's Herbal #165-050	0.20	Odor

Compounding Procedure:

Add Patlac LA to 10% water and adjust pH with Sodium Hydroxide solution to 3.8. In remaining water, dissolve item 7. Add items 5 and 6 and heat to 80C. Separately heat items 1-4 to 80C. Add items 1-4 to items 5-8 and mix. While mixing, cool to 45C and add items 11 and 12. At 40C add prepared Lactic Acid solution (pH 3.8) and homogenize.  
Ref. No. 119-7

Facial Moisturizing Lotion

Elegant mineral oil and lanolin based emulsion.

<u>Ingredients:</u>	<u>W/W</u>	<u>Function</u>
1. Ritapro 165 (R.I.T.A. Blend)	4.00	Emulsifier
2. Mineral Oil	5.00	Emollient
3. Lanolin X-tra DEO (R.I.T.A. Lanolin)	0.50	Emollient
4. Ritapro 100 (R.I.T.A. Blend)	1.50	Emulsifier, Viscosity
5. Dimethicone (Dow 225 Fluid)	0.40	After Feel
6. Distilled/Deionized Water	81.70	----
7. Propylene Glycol	6.00	Moisturization
8. Polyquta 3000 (Polyquaternium-10)	0.50	After Feel
9. Glydant	0.20	Preservative
10. Fragrance - Light Musk 169-119	0.20	Odor

Compounding Procedure:

Dissolve Polyquta 3000 in water. Add item 7 and heat to 70C. Separately heat items 1-5 to 70C. Add this mixture to water mixture. Mix to uniform and cool to 40C. Add preservative and perfume.

Ref. No. 119-35

SOURCE: R.I.T.A. Corp.: Skin Care Formulary

Bubble Bath Oil, Clear, Liquid

	%W/W
Texapon N40	50.0
Cetiol HE	20.0
Isopropyl myristate or palmitate	10.0
Perfume	3.0
Water	17.0
Note: WAS 14%	
Formula No. L63-01	

Bubble Bath Oil, Anhydrous, Clear, Liquid

	%W/W
Texapon WW 99	70.0
Cetiol HE	15.0
Eutanol G	10.0
Perfume	5.0
Note: WAS 70%	
Formula No. L63-05	

Bubble Bath Oil, Anhydrous, Clear

	%W/W
Cetiol R	30.0
Cetiol HE	10.0
Texapon WW 99	58.0
Perfume oil	2.0
Note: WAS 57%	
Formula No. L63-08	

Rosemary Oil Bubble Bath

	%W/W
Texapon TH	27.0
Lamepon ST40	11.3
Comperlan KD	1.3
Lamesoft LMG	5.2
Lamacit GML 20	13.0
Oil of rosemary	8.7
Water	33.5

Note: Low viscous, WAS 28%

Preparation:

Lamecit GML 20 and Oil of rosemary are mixed and added to Texapon TH, Lamepon ST40, Comperlan KD and Lamesoft LMG. The water is then stirred in.

Formula No. L63-14

SOURCE: Henkel KGaA: Cosmetic Model Formulae

**Care-Shower-Bath**  
**Clear, 13.5% active ingredient**

**Recipe:**

A	Genapol LRO liquid	30.00%
	Sodium Laureth Sulfate	
B	Hostapon KCG	5.00%
	Sodium Cocoyl Glutamate	
	Perfume	0.50%
	Cetiol HE	2.00%
	PEG-7 Glyceryl Cocoate	
C	Allantoin	0.40%
D	Water	52.60%
E	Genagen CAB	6.00%
	Cocamidopropyl Betaine	
	Genapol L-3	2.00%
	Laureth-3	
	Dyestuff solution	q.s.
	Preservative	q.s.
F	Sodium chloride	1.50%

**Procedure:**

- I One after another the components of B are added to A.
- II Dissolve C in warmed D.
- III Stir II into I.
- IV One after another the components of E are added to III.
- V If necessary adjust the pH.
- VI Finally adjust the viscosity with F.

**Care-Shower-Bath**  
**With silky lustre effect, 15.0% active ingredient**

**Recipe:**

A	Allantoin	0.40%
	Polymer JR 400	0.50%
	Polyquaternium-10	
B	Water	48.30%
C	Genapol LRO liquid	30.00%
	Sodium Laureth Sulfate	
D	Hostapon KCG	5.00%
	Sodium Cocoyl Glutamate	
	Perfume	0.50%
	Cetiol HE	2.00%
	PEG-7 Glyceryl Cocoate	
	Genapol TSM	4.00%
	PEG-3 Distearate (and) Sodium Laureth Sulfate	
	Dyestuff solution	q.s.
	Preservative	q.s.
	Genagen CAB	6.00%
	Cocamidopropyl Betaine	
	Genapol L-3	2.00%
	Laureth-3	
D	Sodium chloride	1.30%

**Procedure:**

- I Dissolve the components of A in warmed B.
- II One after another the components of C are added to I.
- III If necessary adjust the pH.
- IV Finally adjust viscosity with D.

**SOURCE:** Hoechst: Formulations A I/8063 & A I/8062



Clear Foam Bath with Gluadin AGP

<u>Component:</u>	<u>%</u>
Texapon NSO	30.0
Dehyton K	10.0
Plantaren 1200	10.0
Lamesoft LMG	4.0
Gluadin AGP	0.5
Perfume	q.s.
Water, preservative	up to 100
pH-value: 6,5	
WAS: 17%	
Anionic/Amphoteric surfactant content proportion: 11,5%	
Viscosity mPas: 6500	
Hint: Kind and amount of perfume may influence the viscosity of the product.	
Formulation No.: 89/366/14	

Stimulating, Clear Foam Bath with Balm Mint Extract

<u>Component:</u>	<u>%</u>
Texapon NSO	20.0
Dehyton K	10.0
Plantaren 1200	20.0
Cremogen Melisse	1.0
Cetiol HE	5.0
Perfume	q.s.
Water, preservative	up to 100
pH-value: 6,5	
WAS: 19%	
Anionic/Amphoteric surfactant content: 8,6%	
Viscosity mPas: 4000	
Hint: Kind and amount of perfume may influence the viscosity of the product.	
Formulation No.: 89/366/1	

Bubble Bath with Plantaren 2000 and Essential Oil

<u>Component:</u>	<u>%</u>
Balm mint oil	5.0
Eumulgin L	15.0
Plantaren 2000	30.0
Dehyton K	10.0
Antil 141 liquid	3.8
Arlypon F	1.5
Perfume	q.s.
Water, preservative	up to 100
pH-value: 6,5	
WAS: 18%	
Hint: Kind and amount of perfume may influence the viscosity of the product.	
Formulation No.: 92/056/24	
SOURCE: Henkel KGaA: Model Formulae	

Cream Bubble Bath

	<u>%W/W</u>
Texapon N25	86.0
Comperlan KD	3.0
Cetiol A	3.0
Cutina AGS	6.0
Perfume	2.0
Note: Medium viscous, WAS 27%	
Formula No. L62-01	

Cream Bubble Bath

	<u>%W/W</u>
Texapon N40	50.0
Cetiol HE	10.0
Euperlan PK 771	5.0
Perfume	2.0
Water	33.0
Note: Medium viscous, WAS 15%	
Formula No. L62-03	

Cream Bubble Bath For Tube Filling

	<u>%W/W</u>
Texapon N40	20.0
Texapon MLS	20.0
Cetiol HE	5.0
Isopropyl myristate or palmitate	3.0
Euperlan PK771	20.0
Comperlan KD	4.0
Sodium chloride	3.0
Perfume	1.0
Water	24.0
Note: WAS 21%	
Formula No. L62-04	

Cream Bubble Bath for Tube Filling

	<u>%W/W</u>
Texapon N70	40.0
Comperlan OD	4.0
Cutina AGS	4.0
Isopropyl Myristate or Palmitate	10.0
Sodium chloride	5.0
Perfume	1.0
Water	36.0
Note: WAS 32%	
Preparation: The substances are mixed and heated on the water bath until a homogeneous melt is obtained. After it has cooled to approx. 30C, the perfume is added and the water that has evaporated is replaced.	
Formula No. L62-05	

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Floating Bath Oil

<u>Ingredients:</u>	<u>%W/W</u>	<u>Function</u>
1. Mineral Oil #7	78.00	Emollient
2. Ritachol (Mineral Oil (and) Lanolin Alcohol)	5.00	Silky Feel
3. Pationic ISL (Sodium Isostearoyl Lactylate)	4.00	Substantive
4. Ritawax ALA (R.I.T.A. Blend)	5.00	Skin Feel
5. Patlac IL (Isostearyl Lactate)	7.00	Anti-Grease
6. Fragrance	1.00	Odor

Compounding Procedure:

Combine items in order until clear.

Ref. No. 118-193

Blooming Bath Oil with Shebu

A non-greasy blooming bath oil. Added unique moisturization.

<u>Ingredients:</u>	<u>%W/W</u>	<u>Function</u>
1. White Mineral Oil #7	68.00	Feel
2. PEG-400 Monolaurate	14.00	Conditioning
3. Shebu, Refined (Shea Butter)	2.00	Smoothness
4. Pationic ISL (Sodium Isostearoyl Lactylate)	6.50	Moisture
5. Patlac IL (Isostearyl Lactate)	4.00	Moisture
6. Ritolet-5 (Oleth-5)	2.50	Bloom
7. Arlacet-C	1.00	Bloom
8. Fragrance - Alpine 165-049	2.00	Odor

Compounding Procedure:

Combine items 1-7 and heat to 50C. Mix until clear and cool to 40C. Add fragrance, cool and package.

Ref. No. 118-192

Shebu Floating Bath Oil

An elegant bath oil with talc-like feel.

<u>Ingredients</u>	<u>%W/W</u>	<u>Function</u>
1. Mineral Oil - 70 wt.	75.00	Emollient
2. Shebu Refined (Shea Butter)	3.00	Emollient
3. Ritachol (Mineral Oil (and) Lanolin Alcohol)	5.00	Skin Feel
4. Pationic ISL (Sodium Isostearoyl Lactylate)	4.00	Moisturization
5. Ritawax ALA (R.I.T.A. Blend)	5.00	Emollient
6. Patlac IL (Isostearyl Lactate)	7.00	Mildness
7. Fragrance	1.00	Odor

Compounding Procedure:

Blend all ingredients and mix until clear.

Ref. No. 117-55

SOURCE: R.I.T.A. Corp.: Shower/Bath Care

**Gel After Bath Freshener**

A clear gel bath freshener which liquifies rapidly upon application. Formulated to help soften, smooth and condition skin.

<u>Ingredients:</u>	<u>%W/W</u>	<u>Function</u>
1. Distilled/Deionized Water	69.27	----
2. Acritamer 941 (Carbomer 941)	0.15	Gel
3. Glydant	0.20	Preservative
4. Propylene Glycol	5.00	Moisture
5. SD Alcohol-40	23.00	Refreshing
6. Laneto-50 (PEG-75 Lanolin)	1.00	Smoothness
7. Fragrance	1.00	Odor
8. Triethanolamine @ 50%	0.30	Neutralization
9. Versene-EDTA	0.08	Clarity

**Compounding Procedure:**

Add item 2 to water with high sheer agitation. After complete hydration add items 3 - 9. Agitate until resultant gel is clear and smooth.

Ref. No. 118-187

**After Bath Splash**

A highly emollient, non-drying after bath splash which refreshes while it moisturizes. Excellent after-feel and perfume solubilization.

<u>Ingredients:</u>	<u>%W/W</u>	<u>Function</u>
1. Ethanol-95	70.00	Refreshment
2. Patlac NAL (Sodium Lactate)	5.00	Moisture
3. Patlac IL (Isostearyl Lactate)	4.00	Emollient
4. Pationic ISL (Sodium Isostearoyl Lactylate)	2.00	Conditioning
5. Perfume	2.70	Odor
6. Distilled/Deionized Water	16.30	----

**Compounding Procedure:**

Combine items 1-5 and mix until clear. Slowly add water with good agitation. Filter if desired.

Ref. No. 118-188

SOURCE: R.I.T.A. Corp.: Shower/Bath Care

Hand and Bath GelIngredients:

	<u>%w/w</u>
Phase A:	
Sodium Isethionate	3.00
Sodium Lauryl Sulfate (30%)	15.00
Disodium Laureth-3 Sulfosuccinate	10.00
Water	25.00

## Phase B:

Acrylates/Steareth Stearate-50 Acrylate Copolymer (and) Laureth-3 (and) Propylene Glycol (Antil 208)	1.00
Cocamidopropyl Betaine (Tego Betaine F50)	11.75
Cocamidopropyl Betaine (and) Glycol Distearate (and) Cocamide MEA (and) Cocamide DEA (Tego Pearl B-48)	2.50
Dimethicone Copolyol (Abil B8851)	0.75
Glycerin	3.00
PEG-7 Glyceryl Cocoate (Tegosoft GC)	0.75
Sodium Lactate (and) Sodium PCA (and) Glycine (and) Fructose (and) Urea (and) Niacinamide (and) Inositol (and) Sodium Benzoate (and) Lactic Acid (Lactil)	1.00
Polyglyceryl-4 Isostearate (Isolan GI 34)	1.00
Water	25.25
Preservatives	Q.S.

Procedure:

1. Add ingredients of Phase A in order, mixing between additions.
2. Add the Antil 208, heat to 40C. Mix well. High viscosity may result. Avoid air entrapment.
3. Add remaining ingredients - mixing well during additions.

SOURCE: Goldschmidt Chemical Corp.: Suggested Formulation

Dispersible Bath Oil

A luxury residual skin feel derives from this highly frag-  
ranced classic "blooming" bath oil. Emulan Oil of Mink  
replacing mineral oil will enrich it further.

	<u>Wt. %</u>	<u>CTFA</u>
A. Emulan, Light Fraction	7.5	Mink Oil
PEG-8 Dioleate	7.5	
Isopropyl Myristate	20.0	
Perfume	10.0	
B. Penetek 38/40	55.0	Mineral Oil

Procedure:

Pre-mix Phase A at RT, then slowly add mineral oil with  
continued stirring.

SOURCE: Emulan, Inc.: Suggested Formulation

Liquid Bubble Bath

A high lather non-drying bubble bath.

<u>Ingredients:</u>	<u>%W/W</u>	<u>Function</u>
1. Distilled/Deionized Water	47.30	---
2. Bioterge AS-40 (Sodium C14-16 Olefin Sulfonate)	40.00	Lather
3. Pationic ISL (Sodium Isostearoyl Lactylate)	3.00	Moisture
4. Ritamide C (Cocamide DEA)	5.00	Lather Density
5. Laneto-50 (PEG-75 Lanolin)	4.00	Silky Feel
6. Fragrance	0.50	Odor
7. Preservative	0.20	Preservative

Compounding Procedure:

Combine fragrance with item #4. Add item #3 to the pre-mix. Combine water and item #2. Add pre-mix and agitate until uniform. Add item #5. Adjust pH to 6.8 if necessary.  
Ref. No. 118-189

Shebu Bubble Bath Powder

A high-foaming bath product with a luxurious after-feel.

<u>Ingredients:</u>	<u>%W/W</u>	<u>Function</u>
1. Sodium Lauryl Sulfate (Dry)	18.00	Foam, Cleaning
2. Sodium Bicarbonate	20.00	pH
3. Sodium Sesquicarbonate	38.00	Chelating
4. Sodium Lauryl Sulfoacetate	10.00	Mildness
5. Pationic SSL (Sodium Stearoyl Lactylate)	5.00	Moisture, Mild
6. Laneto AWS (PPG-12, PEG-50 Lanolin)	3.00	Skin Feel
7. Shebu WS (PEG-50 Shea Butter)	5.00	Emolliency
8. Fragrance	1.00	Odor
9. Preservative	q.s.	Preservative

Compounding Procedure:

Combine ingredients 1-5 in a ribbon blender. Pre-mix other ingredients and add to blender while mixing.  
Ref. No. 117-60

SOURCE: R.I.T.A. Corp.: Shower/Bath Care

Pearlescent Shower Gel

Has excellent foaming qualities and a beautiful pearl finish.

<u>Ingredients:</u>	<u>% by Weight</u>
A. Water, Deionized	78.10
B. Carbopol 1342	0.30
C. Steol CS-230	15.00
Monatonic CAB	5.00
D. AMP-95	0.10
Flonac MS	0.50
Suttocide A	1.00

Procedure:

Add A to main kettle. Slowly add B; mix 1 hour. Next add C; mix well. Change to sweep-type mixer. Slowly add D. Mix until smooth gel develops.

Formulation PF-0319 suggested by Presperse

Aloe Vera Herbal Shower Gel

<u>Ingredients:</u>	<u>% by Weight</u>
Part A:	
Deionized water	32.43
Aloe vera gel concentrate 10:1	4.00
Sodium laureth sulfate, 27.5%	50.00
Cocamide betaine	10.00
Citric acid to pH 5-6	q.s.
Part B:	
BHT	0.05
Cocamide DEA	2.00
Part C:	
Fragrance	1.00
Part D:	
Bronopol	0.02
Herbal extract	0.50

Procedure:

Combine A; heat to 40C with stirring. Dissolve B with heat if necessary. Cool to 40C; add C. Add BC to A with stirring. Cool to 30C; add D with stirring. Thicken to 5,000 to 10,000 cps with sodium chloride. Package at room temperature.

Formulation PF-0234 suggested by Aloecorp.

SOURCE: Angus Chemical Co.; Angus Product Formulary

Pearlescent Shower Gel

<u>Component:</u>	<u>%</u>
Texapon NS0	25.0
Texapon SB 3	10.0
Plantaren 2000	6.0
Dehyton K	10.0
Cosmedia Guar C 261 N	0.5
Cetiol HE	1.0
Euperlan PK 3000-AM	5.0
Lamesoft LMG	4.0
Arlypon F	1.0
Antil 141 L	1.5
Colour, perfume	q.s.
Water, preservative	up to 100
pH-value: 6,5	
WAS: 17%	
Viscosity: 90,000	
Hint: Kind and amount of perfume may influence the viscosity of the product.	
Formulation No.: 92/087/92	

Pearlescent Shower Bath with Refattener

<u>Component:</u>	<u>%</u>
Plantaren PS 10	15.0
Dehyton K	10.0
Lamesoft LMG	4.0
Euperlan PK 900	3.0
Perfume oil	q.s.
Water, preservative	up to 100
pH value: 5,5	
WAS: 12	
Viscosity mPas: 12000	
Hint: Kind and amount of perfume may influence the viscosity of the product.	
Formulation No.: 92/184/41	

Mild, Pearlescent Cleansing Lotion

<u>Component:</u>	<u>%</u>
Plantaren PS 10	16.0
Lamequat L	2.0
Euperlan PK 900	3.0
Perfume oil	q.s.
NaCl	1.5
Water, preservative	up to 100
pH value: 5,5	
WAS: 10	
Viscosity mPas: 3400	
Hint: Kind and amount of perfume may influence the viscosity of the product.	
Formulation No.: 92/184/43	

SOURCE: Henkel KGaA: Model Formulae



Pearlescent Shower Gel

<u>Ingredients:</u>	<u>%</u>
Phase A:	
H <sub>2</sub> O, Deionized	46.38
Standapol ES-2	40.00
Hetaine CLA (Canolamidopropyl Betaine)	7.00
Cetiol HE	6.00
Hetoxol L-2 (Laureth-2)	0.50
Hest E.G.D.S. (E.G.D.S.)	0.35
Hetoxol L-4 (Laureth-4)	0.30
Citric Acid	0.04
Phase B:	
Cropeptide W	0.30
Kathon CG	0.07
F.D.&C. Blue #1 (1% Sol.)	0.06

Specifications:

pH: 5.0-6.0

Viscosity #3/12: 7500 cps

Procedure:

- 1) In a stainless steel kettle, combine Phase A. Heat to 75C while mixing.
- 2) Cool to 45C, add Phase B. Mix well.

Formula HSG 92-80

Bubble Bath

<u>Ingredients:</u>	<u>%</u>
H <sub>2</sub> O, Deionized	51.83
Sodium Laureth-3 Sulfate	21.00
Decyl Polyglucose	12.00
Hetaine CLA (Canolamidopropyl Betaine)	10.00
Hetamide RC (Cocamide DEA)	4.00
Hest GC-7 (PEG-7 Glyceryl Cocoate)	1.00
Kathon CG	0.07
Citric Acid	0.10

Specifications:

pH: 7.00

Viscosity #3/12: 2000 cps

Procedure:

In a stainless steel tank equipped with a Lightnin' type mixer, add ingredients one at a time in order listed. Mix until uniform after each addition.

Formula HB 93-108-2

SOURCE: Heterene, Inc.: Suggested Formulations

Protein and Honey Skin Bath

	<u>%W/W</u>
A. Quat-Pro S (Stearyltrimonium Hydroxy Ethyl Hydrolyzed Collagen)	1.00
Methylparaben	0.20
Deionized Water	32.60
B. May-Tein CT (TEA-Cocoyl Hydrolyzed Collagen)	30.00
Sodium Laureth Sulfate	25.00
Collagen Hydrolyzate Cosmetic N-55 (Hydrolyzed Collagen)	5.00
Honey	1.00
C. Fragrance, color	q.s.
Dowicil 200 (Quaternium-15)	0.20
D. Lemon juice concentrate	5.00
Citric Acid to pH 5.5	q.s.

Procedure:

1. Mix and heat phase A to 65C. Mix until dissolved and homogeneous.
2. Add Phase B to Phase A. Mix to incorporate.
3. Add Phase C and D. Mix to incorporate.

Properties:

Very mild, natural-type skin cleanser and beauty bath. Anti-drying, anti-irritant effects are provided by the foaming protein (May-Tein CT). Skin substantivity is high because of cationic effects of quaternized collagen and collagen hydrolyzate. For hand, face and general body cleansing. Makes a delightful, refreshing bath foam.

SOURCE: Maybrook Inc.: Formula #SW-3006

Emollient Bath Gelee

	<u>Weight, %</u>
Mackol 70NS	17.0
Mackamide LLM	20.0
Mackanate EL	20.0
Mackanate WGD	10.0
Paragon Preservative	q.s
Water, Dye, Fragrance qs to	100.0

Procedure:

1. Add Mackamide LLM to Mackol 70NS.
2. Add the remaining components and heat to 60C.
3. Blend until homogeneous. Avoid aeration.
4. Adjust pH to 6.5-7.0 with citric acid.
5. Cool and fill.

SOURCE: McIntyre Group Ltd.: Suggested Formulation

**Shebu After Bath Splash**

An emollient after bath splash. Refreshment without skin dryness. Extra moisturization.

<u>Ingredients:</u>	<u>%W/W</u>	<u>Function</u>
1. Fragrance	2.00	Odor
2. Pationic ISL (Sodium Isostearoyl Lactylate)	2.00	Moisturization
3. Shebu WS (PEG-50 Shea Butter)	2.00	Emollient
4. Alcohol-95	69.00	Refreshment
5. Patlac NAL (Sodium Lactate)	5.00	Moisturizing
6. Patlac IL (Isostearyl Lactate)	5.00	Skin Feel, Mild
7. Distilled/Deionized Water	15.00	----

**Compounding Procedure:**

Pre-mix items 1-3. Pre-mix items 4-6. Mix together with agitation. Add in water until clear.

Ref. No. 117-46

**Shebu After Bath Lotion**

A low alcohol moisturizing lotion which has cooling, soothing properties. Substantive after-feel.

<u>Ingredients:</u>	<u>%W/W</u>	<u>Function</u>
1. Acritamer 941 @ 5% (Carbomer 941)	37.50	Viscosity, Feel
2. Distilled/Deionized Water	43.86	----
3. Patlac IL (Isostearyl Lactate)	1.00	Moisturization
4. Shebu WS (PEG-50 Shea Butter)	1.00	Emollient
5. Ritapro 300 (R.I.T.A. Blend)	0.50	Emulsification
6. Pationic ISL (Sodium Isostearoyl Lactylate)	1.00	Substantivity
7. Rita CA (Cetyl Alcohol)	0.50	Feel
8. Myristyl Lactate	1.00	Smoothness
9. TEA @ 50%	0.64	pH
10. Alcohol-95	12.00	Cooling
11. Fragrance	1.00	Odor

**Compounding Procedure:**

Combine items 1 and 2 and heat to 165F. Pre-mix items 3-8 and heat to 165F. Add to water. Pre-mix items 9-11 and add, then cool to 110F. Adjust pH to 5.5.

SOURCE: R.I.T.A. Corp.: Shower/Bath Care

Shower-Bath

With silky lustre effect, 19.0% active ingredient

Recipe:

A	Genapol LRO liquid	40.00%
	Sodium Laureth Sulfate	
B	Genapol AMG	13.00%
	Magnesium-PEG-3 Cocamide Sulfate	
	Genapol TSM	4.00%
	PEG-3 Distearate (and) Sodium Laureth Sulfate	
	Perfume	0.50%
	Water	32.30%
	Dyestuff solution	q.s.
	Preservative	q.s.
	Genagen CAB	8.00%
	Cocamidopropyl Betaine	
D	Sodium chloride	22.00%

Procedure:

- I One after another the components of B are added to A.  
 II If necessary adjust the pH.  
 III Finally adjust the viscosity with C.

Formula A I/8038

Shower-Bath

Clear, 13.9% active ingredient

Recipe:

A	Genapol LRO liquid	35.00%
	Sodium Laureth Sulfate	
B	Genapol SBE	8.00%
	Disodium Laureth Sulfosuccinate	
	Perfume	0.50%
	Water	52.00%
	Genapol L-3	3.00%
	Laureth-3	
	Dyestuff solution	q.s.
	Preservative	q.s.
C	Sodium chloride	1.50%

Procedure:

- I One after another the components of B are added to A.  
 II If necessary adjust the pH.  
 III Finally adjust the viscosity with C.

Formula A I/8609

SOURCE: Hoechst: Guide Formulations for Cosmetics &amp; Toiletries

Shower-Bath

With pearl lustre effect, 17.2% active ingredient

Recipe:

A	Hostapon CT paste	6.00%
	Sodium Methyl Cocoyl Taurate	
B	Water	24.00%
C	Genapol LRO liquid	40.00%
	Sodium Laureth Sulfate	
	Genapol AMG	6.00%
	Magnesium-PEG-3 Cocamide Sulfate	
	Genapol PGM flussig	6.00%
	Sodium Laureth Sulfate (and) Glycol Distearate	
	(and) Cocamide MEA	
	Perfume	0.70%
	Water	13.50%
	Dyestuff solution	q.s.
	Preservative	q.s.
	Genapol L-3	3.00%
	Laureth-3	
D	Sodium chloride	0.80%

Procedure:

- I Dissolve A in warmed B.  
 II One after another the components of C are added to I.  
 III If necessary adjust the pH.  
 IV Finally adjust the viscosity with D.  
 Formula A I/8057

Shower-Bath

With silky lustre effect, 15.5% active ingredient

Recipe:

A	Hostapon SCI	5.00%
	Sodium Cocoyl Isethionate	
B	Water	20.00%
C	Genapol ZRO liquid	30.00%
	Sodium Laureth Sulfate	
	Genapol TSM	4.00%
	PEG-3 Distearate (and) Sodium Laureth Sulfate	
	Perfume	0.50%
	Water	32.40%
	Dyestuff solution	q.s.
	Preservative	q.s.
	Genagen CAB	6.00%
	Cocamidopropyl Betaine	
D	Sodium chloride	2.10%

Procedure:

- I Dissolve A in warmed B.  
 II One after another the components of C are added to I.  
 III If necessary adjust the pH.  
 IV Finally adjust the viscosity with D.  
 Formula A I/8070

SOURCE: Hoechst: Guide Formulations for Cosmetics &amp; Toiletries

Shower-Bath  
Clear, 16.4% active ingredient

Recipe:

A	Genapol LRO liquid	35.00%
	Sodium Laureth Sulfate	
B	Genapol AMG	10.00%
	Magnesium-PEG-3 Cocamide Sulfate	
	Hostapon KCG	5.00%
	Sodium Cocoyl Glutamate	
	Perfume	0.50%
C	Allantoin	0.40%
D	Water	38.10%
E	Genagen CAB	8.00%
	Cocamidopropyl Betaine	
	Dyestuff solution	q.s.
	Preservative	q.s.
	Genapol L-3	1.50%
	Laureth-3	
F	Sodium chloride	1.50%

Procedure:

- I One after another the components of B are added to A.  
 II Dissolve C in warmed B.  
 III Stir II into I.  
 IV One after another the components of E are added to III.  
 V If necessary adjust the pH.  
 VI Finally adjust the viscosity with F.  
 Formula A I/8048

Shower-Bath  
Clear, 17.3% active ingredient

Recipe:

A	Genapol LRO liquid	35.00%
	Sodium Laureth Sulfate	
B	Hostapon SCHC	5.00%
	Sodium Cocoyl Hydrolyzed Collagen	
	Perfume	0.50%
	Water	42.00%
	Hostapon LEC	4.00%
	Laureth-3 Carboxylic Acid	
C	NaOH (10% in water)	2.70%
D	Genagen CAB	10.00%
	Cocamidopropyl Betaine	
	Dyestuff solution	q.s.
	Preservative	q.s.
E	Sodium chloride	0.80%

Procedure:

- I One after another the components of B are added to A.  
 II Adjust the pH with C.  
 III The components of D are added to II.  
 IV Finally adjust the viscosity with E.  
 Formula A I/8058

SOURCE: Hoechst: Guide Formulations for Cosmetics & Toiletries

Shower-Bath

With silky lustre effect, 24.0% active ingredient

Recipe:

A	Genapol LRO liquid	40.00%
	Sodium Laureth Sulfate	
B	Genapol AMG	10.00%
	Magnesium-PEG-3 Cocamide Sulfate	
	Genapol TSM	4.00%
	PEG-3 Distearate (and) Sodium Laureth Sulfate	
	Cetiol HE	4.00%
	PEG-7 Glyceryl Cocoate	
	Perfume	0.50%
	Dyestuff solution	q.s.
	Preservative	q.s.
	Genagen CAB	8.00%
	Cocamidopropyl Betaine	
C	Polymer JR 400	0.50%
	Polyquaternium-10	
D	Water	30.00%
E	Genapol L-3	2.00%
	Laureth-3	
F	Sodium chloride	1.00%

Procedure:

- I One after another the components of B are added to A.  
 II Dissolve C in warmed D.  
 III Stir II into I, then add E.  
 IV If necessary adjust the pH.  
 V Finally adjust the viscosity with F.  
 Formula A I/8066

Fitness-Shower-Bath

Clear, 14.2% active ingredient

Recipe:

A	Genapol LRO liquid	45.00%
	Sodium Laureth Sulfate	
	Genapol AMG	15.00%
	Magnesium-PEG-3 Cocamide Sulfate	
B	Menthol	0.20%
	Camphor	0.10%
	Rosmarin bath	0.30%
C	1,2-Propylen glycol	2.00%
D	Water	32.90%
	Horse chestnut extract	0.50%
	Dyestuff solution	q.s.
	Preservative	q.s.
	Genapol L-3	2.00%
	Laureth-3	
E	Sodium chloride	2.00%

Procedure:

- I Dissolve B in C. II. Add the solution of I to A.  
 III One after another the components of D are added to II.  
 IV If necessary adjust the pH. V Finally adjust the viscosity with E.

Formula A I/8046

SOURCE: Hoechst: Guide Formulations for Cosmetics &amp; Toiletries

Shower-Bath 2 in 1  
18.3% active ingredient

Recipe:

A	Allantoin	0.40%
	Polymer JR 400	0.50%
	Polyquaternium-10	
	Hostapon SCID	4.00%
	Sodium Cocoyl Isethionate	
B	Water	46.20%
C	Genapol LRO liquid	30.00%
	Sodium Laureth Sulfate	
	Hostapon KCG	5.00%
	Sodium Cocoyl Glutamate	
	Perfume	0.50%
	Cetiol HE	2.00%
	PEG-7 Glyceryl Cocoate	
	Genapol TSM	4.00%
	PEG-3 Distearate (and) Sodium Laureth Sulfate	
	Dyestuff solution	q.s.
	Preservative	q.s.
	Genagen CAB	5.00%
	Cocamidopropyl Betaine	
	Genapol L-3	2.00%
	Laureth-3	
D	Sodium chloride	0.70%

Procedure:

- I Dissolve the components of A by warming stirring in B (60C).
- II Cool down and add components of C at 35C under stirring.
- III If necessary adjust the pH.
- IV Finally adjust the viscosity with D.

SOURCE: Hoechst: Guide Formulations for Cosmetics & Toiletries:  
Formulation A I/8061



Shower Bath, Clear

	<u>%W/W</u>
Texapon N40	50.0
Cetiol HE	3.0
Comperlan KD	2.0
Sodium chloride	3.0
Perfume, water-soluble	1.0
Water	41.0

Note: High viscous, WAS 16%  
Formula No. L65-01

Shower Bath, Clear, Liquid

	<u>%W/W</u>
Texapon N25	20.0
Texapon TH	20.0
Comperlan KM	3.0
Comperlan KD	5.0
Perfume	1.0
Water	51.0

Note: Medium viscous, WAS 21%  
Formula No. L65-03

Shower Bath, Clear, Liquid

	<u>%W/W</u>
Texapon N40	40.0
Aethoxal B	10.0
Sodium chloride	3.0
Perfume	3.0
Water	44.0

Note: Low viscous, WAS 11%  
Formula No. L65-05

Shower Bath, Clear, Liquid

	<u>%W/W</u>
Texapon MLS	40.0
Texapon TH	20.0
Comperlan LS	3.0
Cetiol HE	5.0
Sodium chloride	1.5
Perfume	1.0
Water	29.5

Note: Medium viscous, WAS 26%  
Formula No. L65-06  
SOURCE: Henkel KGaA: Cosmetic Model Formulae

Shower Bath, Clear

	<u>%W/W</u>
Texapon N40	40.0
Aethoxal B	5.0
Dehyton AB30	10.0
Comperlan KD	3.0
Perfume	1.0
Water	41.0
Note: Medium viscous, WAS 17%	
Formula No. L65-09	

Shower Bath, Clear, Especially Skin Compatible

	<u>%W/W</u>
Texapon K14S special	46.0
Comperlan LS	3.0
Sodium chloride	1.0
Perfume	1.0
Citric acid 10% solution	0.4
Water	48.6
Note: WAS 16%	
Formula No. L65-11	

Shower Bath, Clear, Especially Skin Compatible

	<u>%W/W</u>
Texapon K14S 70 special	18.5
Comperlan LS	3.0
Sodium chloride	2.0
Cetiol HE	5.0
Perfume	1.0
Citric acid 10% solution	0.6
Water	69.9
Note: WAS 16%	
Formula No. L65-14	

Shower Bath, Clear, Especially Skin Compatible

	<u>%W/W</u>
Texapon K14S 70 special	27.0
Comperlan LS	3.0
Sodium chloride	2.3
Perfume	1.0
Citric acid 10% solution	0.6
Water	66.1
Note: WAS 23%	
Formula No. L65-16	

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Shower Bath, Clear Refatting

	%W/W
Texapon K14S 70 special	27.0
Comperlan LS	2.0
Sodium chloride	2.0
Cetiol HE	5.0
Perfume	1.0
Citric acid 10% solution	0.6
Water	62.4
Note: WAS 22%	
Formula No. L65-17	

Sport Shower Bath Especially Skin Compatible

	%W/W
Texapon K14S special	40.0
Comperlan COD	2.0
Sodium chloride	1.0
Dehyton K	10.0
Cetiol HE	2.0
Perfume	1.0
Water	44.0
Note: WAS 16%	
Formula No. L65-19	

Protein Shower Bath

	%W/W
Texapon N25	53.6
Lamepon S	16.7
Comperlan KD	2.0
Lamesoft LMG	2.0
Nutrilan L	5.7
Perfume	0.4
Sodium chloride	0.5
Water	19.1
Note: High viscous, WAS 23%	
Preparation: Mix the ingredients in the order shown above.	
Comperlan KD and Lamesoft LMG should be worked in while a little heat is applied.	
Formula No. L65-22	

Shower Bath in Aerosol Form

	%W/W
Texapon ASV	50.0
Dehyton K	10.0
Comperlan KD	4.0
Cetiol HE	10.0
Perfume	1.0
Water	25.0
Note: WAS 22%	
Filling: 92 parts shower bath	
8 parts Frigen 12	
Formula No. L65-26	

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Shower Bath Gel

Shower gel based on natural sucrose esters. Mildness while leaving a smooth skin feel.

<u>Ingredients:</u>	<u>%W/W</u>	<u>Function</u>
1. Grilloten LSE-87K Soft (Sucrose Cocoate)	4.00	Mildness
2. Distilled/Deionized Water	38.95	----
3. Sodium Laureth-2 Sulfate (Standapol ES-2)	44.00	Lather
4. Disodium Cocamphodiacetate (Mackam 2C)	8.00	Lather
5. PEG-55 Propylene Glycol Oleate (Antil 141B)	1.50	Viscosity
6. Ritasynt IP (R.I.T.A. Blend)	3.00	Opacity
7. Citric Acid (25% Soln)	0.20	pH Control
8. Fragrance	0.25	Odor
9. Preservative	0.10	Preservative

Compounding Procedure:

Combine item 1 with 30% of the water. Heat to 175F with mixing. Combine items 3-6 with remaining water and heat to 175F. Add to other pre-mix. Cool to 120F. Add preservative and perfume. Adjust pH to 5.5-6.0 if necessary.

Ref. No. 118-186

Shower/Bath Gel

Low eye irritation formulation.

<u>Ingredients:</u>	<u>%W/W</u>	<u>Function</u>
1. Grilloten LSE 65K (Sucrose Cocoate)	2.00	Mildness
2. Pationic 138C (Sodium Lauroyl Lactylate)	1.80	Eye Mildness
3. Distilled/Deionized Water	40.90	-----
4. Sodium Laureth-2-Sulfate (Standapol ES-2)	45.00	Lather
5. Cocamidopropyl Betaine (Mackam J)	8.00	Lather
6. Sodium Chloride (25% Soln.)	2.00	Viscosity Control
7. Fragrance	0.20	Odor
8. Preservative	0.10	Preservative

Compounding Procedure:

Combine items 1 and 2 with 25% of the water. Mix until uniform. Combine items 4 and 5 and mix until uniform. Add first pre-mix to second with agitation. Add items 7 and 8 and adjust viscosity as desired with item 6.

Ref. No. 118-185

SOURCE: R.I.T.A. Corp.: Shower/Bath Care

**Shower/Bath Gel**

Non-drying formulation designed to clean and leave skin moisturized.

<u><b>Ingredients:</b></u>	<u><b>%W/W</b></u>	<u><b>Function</b></u>
1. Grilloten LSE-87K (Sucrose Cocoate)	3.00	Mildness
2. Rita EGDS (Glycol Distearate)	0.50	Opacity
3. Pationic 138C (Sodium Lauroyl Lactylate)	2.50	Mildness
4. PEG-55 Propylene Glycol Oleate (Antil 141B)	1.00	Feel
5. Distilled/Deionized Water	40.60	----
6. Sodium Laureth-2-Sulfate (Standapol ES-2)	51.00	Lather
7. Promois ECP (Collagen)	1.00	Conditioning
8. Citric Acid @ 50%	0.10	pH Control
9. Fragrance	0.20	Odor
10. Preservative	0.10	Preservative

**Compounding Procedure:**

Combine items 1,3,5 and 6 and heat to 160F with agitation. Combine items 2 and 4 and mix at 160F. Add to batch with mixing. Cool to 120F and add items 9 and 10. Cool to 110F and add item 7. Adjust pH to 6.0-6.5 with item 8.  
Ref. No. 118-183

**Silky Feel Shower Gel**

High lather shower gel base with added moisturization. Silky skin feel.

<u><b>Ingredients:</b></u>	<u><b>%W/W</b></u>	<u><b>Function</b></u>
1. Sodium Laureth-3-Sulfate (Standapol ES-3)	53.00	Cleaning
2. Ritamide C (Cocamide DEA)	4.00	Lather
3. Ritawax-15 (Laneth-15)	3.00	Moisture
4. Pationic ISL (Na Isostearoyl Lactylate)	3.00	Moisture
5. Ritapeg 150 DS (PEG-150 Distearate)	0.50	Viscosity
6. Methylparaben	0.15	Preservative
7. Rita PEO-2 (PEG-9M)	0.25	Silky Feel
8. Distilled/Deionized Water	35.65	----
9. Fragrance	0.40	Odor
10. Kathon CG	0.05	Preservative

**Compounding Procedure:**

Heat items 1-6 to 165F. Slowly add item 7 to water, mix until dissolved. Heat to 165F. Add to items 1-6 and mix until uniform. Add fragrance and preservative after cooling to 120F.  
Ref. No. 116-143

**SOURCE: R.I.T.A. Corp.: Shower/Bath Care**

Shower Bath, Pearly, Especially Skin Compatible

	%W/W
Texapon ASV	35.0
Dehyton K	15.0
Cutina EGMS	2.0
Perfume	1.0
Water	47.0

Note: WAS 15%  
Formula No. L66-23

Shower Bath, Pearly, Especially Skin Compatible

	%W/W
Texapon ASV	25.0
Texapon MLS	25.0
Comperlan COD	3.0
Cetiol HE	2.0
Euperlan MPK850	8.0
Sodium chloride	2.0
Water	35.0

Note: WAS 20%  
Formula No. L66-25

Shower Bath, Pearly, Especially Skin Compatible

	%W/W
Texapon ASV	20.0
Texapon TH	20.0
Comperlan OD	4.0
Cetiol HE	2.0
Euperlan MPK 850	8.0
Water	46.0

Note: WAS 22%  
Formula No. L66-27

Shower Bath, Pearly, Especially Skin Compatible

	%W/W
Texapon ASV	20.0
Texapon MG	15.0
Comperlan OD	3.0
Aethoxal B	2.0
Euperlan MPK 850	8.0
Water	52.0

Note: Viscous, WAS 15%

Formula No. L66-28

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Shower Bath, Pearly

	<u>%W/W</u>
Texapon N25	20.0
Texapon EVR	30.0
Comperlan KD	2.0
Perfume	1.0
Water	47.0
Note: High viscous, WAS 19%	
Formula No. L66-01	

Shower Bath, Pearly

	<u>%W/W</u>
Texapon N40	20.0
Texapon EVR	30.0
Comperlan KD	2.0
Cetiol HE	5.0
Perfume	1.0
Water	42.0
Note: High viscous, WAS 19%	
Formula No. L66-03	

Shower Bath, Pearly for Tube Filling

	<u>%W/W</u>
Texapon N40	50.0
Cutina AGS	7.0
Comperlan OD	5.0
Comperlan KD	4.0
Cetiol A	5.0
Perfume	2.0
Water	27.0
Note: WAS 23%	
Formula No. L66-05	

Shower Bath, Pearly

	<u>%W/W</u>
Texapon K14S special	30.0
Euperlan PK810	10.0
Comperlan KD	3.0
Sodium chloride	0.5
Perfume	1.0
Citric acid 10% solution	0.5
Water	55.0
Note: WAS 15%	
Formula No. 66-07	

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Shower Bath, Pearly, Refatting

	%W/W
Texapon K14S special	40.0
Euperlan PK 810	10.0
Comperlan KD	3.0
Cetiol HE	3.0
Perfume	1.0
Citric acid 10% solution	0.4
Water	42.6
Note: WAS 18%	
Formula No. L66-09	

Shower Bath, Pearly

	%W/W
Texapon K14S 70 special	12.0
Sodium chloride	2.0
Euperlan PK810	10.0
Comperlan KD	3.0
Perfume	1.0
Citric acid 10% solution	0.6
Water	71.4
Note: WAS 15%	
Formula No. L66-11	

Shower Bath, Pearly, Refatting

	%W/W
Texapon K14S 70 special	12.0
Sodium chloride	2.0
Euperlan PK 810	10.0
Comperlan KD	3.0
Cetiol HE	3.0
Perfume	1.0
Citric acid 10% solution	0.6
Water	68.4
Note: WAS 15%	
Formula No. L66-12	

Shower Bath, Pearly, Refatting

	%W/W
Texapon K14S 70 special	19.0
Sodium chloride	2.0
Euperlan PK810	10.0
Comperlan KD	2.0
Perfume	1.0
Citric acid 10% solution	0.6
Water	65.4
Note: WAS 14%	
Formula No. L66-14	

SOURCE: Henkel KGaA: Suggested Formulations



Shower Bath, Pearly, Refatting

	%W/W
Texapon K14S 70 special	19.0
Sodium chloride	2.0
Euperlan PK 810	10.0
Comperlan KD	2.0
Cetiol HE	5.0
Perfume	1.0
Citric acid 10% solution	0.6
Water	60.4
Note: WAS 20%	
Formula No. L66-15	

Shower Bath, Pearly, Especially Skin Compatible

	%W/W
Texapon K14S special	40.0
Dehyton G	10.0
Euperlan PK 771	3.0
Comperlan COD	2.0
Sodium chloride	0.5
Cetiol HE	2.0
Perfume	1.0
Citric acid 10% solution	2.0
Water	39.5
Note: WAS 18%	
Formula No. L66-17	

Shower Bath, Pearly, Especially Skin Compatible

	%W/W
Texapon K14S special	40.0
Dehyton K	10.0
Euperlan PK771	3.0
Comperlan COD	2.0
Sodium chloride	0.5
Cetiol HE	2.0
Perfume	1.0
Water	41.5
Note: WAS 18%	
Formula No. L66-19	

Shower Bath, Pearly, Especially Skin Compatible

	%W/W
Texapon ASV	38.0
Dehyton AB30	19.0
Euperlan PK810	5.0
Perfume	0.5
Water	37.5
Note: WAS 20%	
Formula No. L66-20	

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Shower Bath & Emulsion "Two in One"

<u>Component:</u>		<u>%</u>
I	Eumulgin B 2	1.0
	Eutanol G	3.0
	Lamecreme DGE 18	4.0
II	Lytron 631	2.0
	Water, preservative	up to 100
III	Plantaren PS 10	40.0
IV	Perfume	0.5

Viscosity mPas: 20000

WAS: 24,5

pH-value: 5,5

Procedure:

Melt components under I at 70-80C and mix homogeneously. Heat phase II to 75C, add to I and stir at temperature for 5 minutes. Continue stirring and cool down to 60C. Add phase III at room temperature to the premixed emulsion. Stir homogeneously. At temperature below 40C add perfume. Adjust pH to and control viscosity. If necessary finally adjust with NaCl and de-aerate. Formulation No.: 92/135/49

Pearly Sheen Shower Bath Two-in-One

<u>Component:</u>		<u>%</u>
	Texapon ASV 70 spez.	12.4
	Plantaren 1200	4.0
	Euperlan PK 3000 OK	4.0
	Lamequat L	4.0
	Panthenol USP	1.0
	Water, preservative	up to 100

pH-value: 6,5

Formulation No.: 91/352/8

Pearlescent Foam Bath with Refattener

<u>Component:</u>		<u>%</u>
	Plantaren PS 10	22.0
	Dehyton K	15.0
	Cosmedia Guar C 261	0.5
	Cetiol HE	2.0
	Euperlan PK 3000-OK	5.0
	Perfume oil	q.s.
	Water, preservative	up to 100

pH-value: 5,5

WAS: 18

Viscosity mPas: approx.: 45,000

Hint: Kind and amount of perfume may influence the viscosity of the product.

Formulation No.: 92/184/12

SOURCE: Henkel KGaA: Model Formulae

Shower Bath 2-in-1, Shower & Cream

<u>Component:</u>	<u>%</u>
Texapon NSO	20.0
Dehyton K	20.0
Plantaren 2000	5.0
Nutrilan I-50	1.0
Cosmedia Guar C261 Quellung/Swelling	20.0
Euperlan PK 3000 AM	5.0
Lytron 631	2.0
Arlypon F	0.6
Water, preservative	up to 100
Viscosity/approx. (20C Brookfield): 13000	
pH-value/approx: 5,5	
WAS/approx.: 14	
Formulation No.: 93/157/6	

Shower Bath 2-in-1, Shower & Cream

<u>Component:</u>	<u>%</u>
Texapon NSO	20.0
Dehyton K	20.0
Plantaren 2000	5.0
Euperlan PK 3000 AM	3.0
Cosmedia Guar C261 Quellung/Swelling	20.2
Cetiol HE	0.2
Lytron 631	1.0
Arlypon F	0.6
Glycerin 86%	5.0
Water, preservative	up to 100
Viscosity, approx. (20C Brookfield): 15000	
Formulation No.: 93/157/9	

Shower Bath & Emulsion Two-in-One

<u>Component:</u>	<u>%</u>
I Cutina KD 16	10.0
Monomuls 90-L 12	3.0
Cetiol 868	3.0
II Texapon N 28	40.0
Water	up to 100
III Plantaren 1200	20.0
Perfume	0.5
Cetiol HE	2.0
IV Dehyton K	2.0
Lytron 621	2.0
Preservatives	
Citric acid to adjust pH	
pH: 5-6	
Viscosity 25C mPas: 12500	
WAS: 44	
Formulation No.: 22/B	

SOURCE: Henkel KGaA: Model Formulae

Shower Gel

Clear, high-viscosity gel with regreasing effect.

Material/CTFA-Index:

Genapol LRO/Sodium Laureth Sulfate	35.00%
Dehyton AB 30/Coco-Betaine	10.00
Aethoxal B/PPG-5 Laureth-5	5.00
Wacker-Belsil DMC 6038/Dimethicone Copolyol	5.00
Comperlan KD/Cocamide DEA	3.00
Water	42.00

Preservatives, fragrances, pigments q.s.

Mix all ingredients well.

Formulation 895 AH

Shower Gel

Clear, thin gel.

Material/CTFA-Index:

Hoe S 3267/Cocamidopropyl Betaine	22.50%
Wasser dest./Water	53.50
Texapon NA/Ammonium Laureth Sulfate	22.50
Belsil DMC 6032/Dimethicone Copolyol Acetate	1.00
Ammonium Chloride	0.50
Preservatives, fragrances	q.s.

Dissolve Hoe S 3267 thoroughly in water. Add Texapon NA and Belsil DMC 6032. Homogenise the mixture. Regulate the viscosity with the ammonium chloride.

Temperature stability: at 45C over 10 weeks.

Formulation 155 AH

SOURCE: Wacker Silicone: Suggested Formulations

Shower Gel & Body Lotion

<u>Component:</u>	<u>%</u>
Texapon NSO	40.0
Dehyton PK	8.0
Euperlan PO	2.0
Comperlan COD	1.0
Cetiol HE	2.0
Cosmedia Guar C261	0.2
Water, preservative	up to 100
NaCl	2.0

pH-value: 5,5-6,0

Viscosity mPas Brookfield, RVT, 20C: 12800

Formulation No.: C-FB-308/01a

Pearlescent Foam Bath

	<u>%</u>
Plantaren PS 10	22.0
Dehyton K	15.0
Cosmedia Guar C 261	0.5
Cetiol HE	2.0
Euperlan PK 3000-OK	5.0
Perfume oil	q.s.
Water, preservative	up to 100
pH-value: 5,5	
WAS: 18	

Viscosity mPas: approx: 45,000

Hint: Kind and amount of perfume may influence the viscosity of the product.

Formulation No.: 92/184/12

Foam Bath Concentrate

<u>Component:</u>	<u>%</u>
Texapon K 14 S 70 spez.	25.0
Plantaren 2000	20.0
Dehyton K	20.0
Cetiol HE	5.0
Nutrilan I-50	2.0
Eumulgin HRE 60	5.0
Citric acid (sol.50%)	0.5
Perfume	q.s.
Water, preservative	up to 100
pH-value: 6.5	
Viscosity mPas: 5600	

Note: Kind and amount of perfume may influence the viscosity of the product.

Formulation No.: 92-174-17

SOURCE: Henkel KGaA: Model Formulae

Skin Conditioning Shower Gelee

Smooth, moisturizing shower gelee. Substantive moisturizing effect. Skin conditioner.

<u>Ingredients:</u>	<u>%W/W</u>	<u>Function</u>
1. Sodium Laureth-2-Sulfate	53.00	Lather
2. Distilled/Deionized Water	33.65	----
3. Ritamide C (Cocamide DEA)	4.00	Lather
4. Ritawax 15 (Laneth-15)	3.00	Conditioning
5. Pationic ISL (Sodium Isostearoyl Lactylate)	3.00	Moisture
6. Ritapeg 150 DS (PEG-150 Distearate)	0.50	Viscosity
7. Methylparaben	0.15	Preservative
8. Fragrance	1.00	Odor
9. Sodium Chloride (25% Soln.)	1.00	Viscosity
10. Patlac LA @ 44% (Lactic Acid)	0.70	pH Adjustment

Compounding Procedure:

Heat items 1-7 to 165F with agitation. Cool to 120F and add fragrance. Adjust pH and viscosity as desired.

Ref. No. 118-190

Shebu Shower Gelee

A bath gelee with a smooth unique feel.

<u>Ingredients:</u>	<u>%W/W</u>	<u>Function</u>
1. Sodium Laureth Sulfate (ES-3)	53.00	Clean/Lather
2. Ritamide C (Cocamide DEA)	4.00	Lather Booster
3. Shebu WS (PEG-50 Shea Butter)	3.00	Moisturizing
4. Pationic ISL (Sodium Isostearoyl Lactylate)	3.00	Moisture/ Mild
5. Preservative	0.30	Preservative
6. Distilled/Deionized Water	35.85	----
7. Fragrance	0.25	Odor
8. Rita PEO-1 (PEG-5M)	0.10	Slip/Thick- ener
9. Ritapeg 150 DS (PEG-150 DS)	0.50	Thickener

Compounding Procedure:

Heat ingredients 1-6 to 65C with agitation. Cool to 43C and add perfume. Adjust viscosity with Sodium Chloride and pH with lactic acid.

Ref. No. 117-53B

SOURCE: R.I.T.A. Corp.: Shower/Bath Care

Vitamin Bath Oil

	<u>%W/W</u>
Aethoxal B	90.0
Vitamin oil Biocorno	5.0
Perfume	5.0

Formula No. L67-13

Herbal Bath Oil

	<u>%W/W</u>
Aethoxal B	52.0
Dehydol LS2 DEO	10.0
Cetiol A	15.0
Myritol 318	20.0
Oil of rosemary	3.0

Formula No. L67-15

Bath Oil

	<u>%W/W</u>
Dehydol LS2 DEO	10.0
Cetiol R	30.0
Cetiol A	15.0
Cetiol 868	40.0
Perfume oil	5.0

Formula No. L67-18

Lavender Bath Oil

	<u>%W/W</u>
Lavender oil	37.0
Lamacit GML20	46.0
Water	17.0

Preparation: Mix lavender oil and Lamacit GML-20. Add water slowly.

Formula No. L67-21

Lemon Balm Bath Oil

	<u>%W/W</u>
Lemon balm oil	24.4
Lamacit GML 20	56.9
Water	18.7

Formula No. L67-22

SOURCE: Henkel KGaA: Cosmetic Model Formulae

## **Section IV**

### **Beauty Aids**



**Ajinomoto Moisturizing Foundation with Ajidew, Eldew,  
Marine-Dew and Amihope**

<b><u>Ingredients/Trade Name:</u></b>	<b><u>% by Weight</u></b>
<b>Part A:</b>	
Deionized Water	61.15
Magnesium Aluminum Silicate	0.70
Cellulose Gum	0.15
Trisodium EDTA	0.10
Sodium PCA/Ajidew N-50	1.00
Triethanolamine 85%	0.60
<b>Part B:</b>	
Methylparaben (and) Butylparaben (and) Ethylparaben (and) Propylparaben	0.30
Stearic Acid	2.50
Propylene Glycol Stearate SE	2.00
Polysorbate 60	1.70
Cetearyl Octanoate	6.00
Cetyl Alcohol	2.00
Sorbitan Stearate	0.60
Dimethicone/Dow Corning 200 (350cs)	0.50
Di (cholsteryl, behenyl, octyldodecyl) N-lauroyl-L-glutamic acid ester/Eldew CL-301	5.00
Phenoxyethanol	0.60
<b>Part C:</b>	
Propylene Glycol	6.00
Iron Oxides and Talc	2.00
Titanium Dioxide	5.00
Lauroyl Lysine/Amihope-LL	0.10
<b>Part D:</b>	
Partially Deacetylated Chitin (1% Solution)/Marine-Dew	2.00

**Procedure:**

Disperse Magnesium Aluminum Silicate and Cellulose Gum in deionized water. Heat to 80 degrees C. Add remaining Part A ingredients. Mix well. Heat Part B to 80 degrees C. Add Part B to Part A. Mix at 80 degrees C for 15 minutes. Homogenize Part C. Add to the batch. Mix until uniform. Cool to 40 degrees C. Add Part D. Continue mixing and cooling to 35 degrees C.

Appearance: Beige cream

pH: 7.40 to 8.00

Viscosity: 20,000-25,000 cps (RVT #6 @ 10 rpm @ 25C)

**SOURCE: Ajinomoto USA, Inc.: Suggested Formulations**

Alcohol-Free Cologne

This sprayable product is light, elegant and will not dry or sting the skin.

<u>Ingredient (CTFA)</u>	<u>Weight%</u>	<u>Function</u>
Part A:		
Deionized Water	92.88	Diluent
DMDM Hydantoin (1)	0.30	Preservative
Methylparaben	0.10	Preservative
Propylparaben	0.05	Preservative
Part B:		
Cyclomethicone (2)	4.00	Lubricant
Pemulen TR-2	0.15	Emulsifier/ Stabilizer
Part C:		
Fragrance, Noville #31563	2.00	
Oleth-10 (3)	0.30	P.S. Reduction
Part D:		
Triethanolamine (99%)	0.12	Neutralizing Agent
Part E:		
Disodium EDTA	0.10	Chelating Agent and Viscosity Adjustment

Preparation:

1. Combine Part A ingredients in a vessel which will contain the entire formulation. Mix until parabens have dissolved.
2. Slurry Pemulen in cyclomethicone. Disrupt any soft agglomerates of Pemulen. With moderate agitation, add Part B to Part A.
3. Blend Part C ingredients and add to Parts A/B. Continue mixing for 10-20 minutes to allow resin to swell. Add Part D and mix vigorously to produce a smooth emulsion.
4. Mix Part E into emulsion incrementally to adjust viscosity down to 600-800 cps.

SOURCE: BF Goodrich Co.; Formula P0007

Alcohol-Free Cologne

This sprayable product is light, elegant and will not sting the skin.

<u>Ingredient (CTFA):</u>	<u>Weight%</u>	<u>Function</u>
<b>Part A:</b>		
Deionized Water	92.38	Diluent
DMDM Hydantoin (1)	0.30	Preservative
Methylparaben (2)	0.10	Preservative
Propylparaben (2)	0.05	Preservative
<b>Part B:</b>		
Cyclomethicone (3)	4.00	Lubricant
Fragrance, Noville #31337	2.00	
Isostearyl Benzoate (4)	0.50	Fragrance Fixer
Oleth-10 (5)	0.30	Particle Size Reduction
Pemulen TR-2 (6)	0.15	Emulsifier/Stabilizer
<b>Part C:</b>		
Triethanolamine (99%)	0.12	Neutralizing Agent
<b>Part D:</b>		
Disodium EDTA	0.10	Chelating Agent
(1) Glydant (Lonza)		
(2) (Protameen Chemicals)		
(3) 245 Fluid (Dow Corning)		
(4) Finsolv SB (Finetex)		
(5) Procol OA-10 (Protameen Chemicals), Brij 96 (ICI)		
(6) Acrylates/C10-30 Alkyl Acrylate Crosspolymer (BFGoodrich)		

**Preparation:**

1. Combine Part A ingredients in a vessel which will contain the entire formulation. Mix until parabens have dissolved.
2. Blend Part B ingredients in a separate vessel. Pemulen should be slurried in this phase. Disrupt any soft agglomerates of the resin.
3. With moderate agitation, add Part B to Part A. Mix for 10-20 minutes to allow resin to swell. Add Part C and mix vigorously to produce a smooth emulsion.
4. Mix Part D into emulsion incrementally to adjust viscosity downward to 600-900 cps.

SOURCE: BF Goodrich Co.: Formula P0013

All-Over AHA Moisturizer  
#29-0805-A

An all-over face and body lotion using natural alpha hydroxy acids from fruits to gently exfoliate and retexturize the skin for smoother, younger-looking skin. To help counteract the dryness that may result from skin stimulation, Ajidew N-50 is added to normalize the skin's outer layer and provide optimum moisturization.

<u>Ingredient/Trade Name:</u>	<u>% by Weight</u>
Part A:	
Deionized Water	66.45
Magnesium Aluminum Silicate/Veegum Ultra	1.00
Xanthan Gum/Keltrol	0.30
Disodium EDTA/Hamp-Ene Na2	0.05
Methylparaben	0.20
Propylene Glycol	3.00
Glycerin	2.00
Sodium Lactate (and) Sodium PCA (and) Sorbitol (and) Proline/Prodew 300	3.00
Part B:	
Stearic Acid/Emersol 132	1.00
Glyceryl Stearate (and) PEG-100 Stearate/Arlacel 165	1.00
Glyceryl Stearate/Lexemul 55G	3.00
Diocetyl Maleate/Bernel Ester COM	5.00
C12-15 Alkyl Benzoate/Finsolv TN	4.00
Dimethicone/Dow Corning 200, 350 cs.	0.20
Cetyl Alcohol/Lanette 16	2.00
Propylparaben	0.10
Part C:	
Triethanolamine 99%	0.40
Part D:	
Diazolidinyl Urea/Germall II	0.30
Lemon Passion Fruit Complex Provital	5.00

**Procedure:**

Disperse Veegum Ultra and Keltrol in deionized water. Heat to 75C. Add remaining Part A ingredients. Mix until uniform. Heat Part B to 75C. Add Part B to Part A while mixing with good agitation. Add Part C. Mix for 30 minutes until completely homogeneous. Cool to 40C. Add Part D. Continue mixing and cooling to 35C.

Appearance: Opaque, white lotion

pH: 3.40-3.80

Viscosity: 4,000-9,000 (RVT #5 @ 10 rpm @ 25C)

NOTE: May infringe on an existing patent. Please consult your legal advisor.

SOURCE: Ajinomoto USA Inc: Suggested Formulation #29-0805-A

**All-Over AHA Moisturizer**

An all-over face and body lotion using natural alpha hydroxy acids from fruits to gently exfoliate and retexturize the skin for smoother, younger-looking skin. To help counteract the dryness that may result from skin stimulation, Ajidew N-50 is added to normalize the skin's outer layer and provide optimum moisturization.

<u>Ingredient/Trade Name:</u>	<u>% by Weight</u>
<b>Part A:</b>	
Deionized Water	66.55
Magnesium Aluminum Silicate/Veegum Ultra	1.00
Xanthan Gum/Keltrol	0.30
Disodium EDTA/Hamp-Ene Na2	0.05
Methylparaben	0.20
Propylene Glycol	3.00
Glycerin	2.00
Sodium PCA/Ajidew N-50	5.00
<b>Part B:</b>	
Stearic Acid/Emersol 132	1.00
Glyceryl Stearate (and) PEG-100 Stearate/Arlacel 165	4.00
Diocetyl Maleate/Bernel Ester COM	5.00
C12-15 Alkyl Benzoate/Finsolv TN	4.00
Dimethicone/Dow Corning 200, 350 cs.	0.20
Cetyl Alcohol/Lanette 16	2.00
Propylparaben	0.10
<b>Part C:</b>	
Triethanolamine 99%	0.30
<b>Part D:</b>	
Diazolidinyl Urea/Germall II	0.30
Lemon Passion Fruit Complex Provital	5.00

**Procedure:**

Disperse Veegum Ultra and Keltrol in deionized water. Heat to 75C. Add remaining Part A ingredients. Mix until uniform. Heat Part B to 75C. Add Part B to Part A while mixing with good agitation. Add Part C. Mix for 30 minutes until completely homogeneous. Cool to 40C. Add Part D. Continue mixing and cooling to 35C.

Appearance: Opaque, white lotion

pH: 3.60-4.20

Viscosity: 12,000-15,000 cps (RVT #5 @ 10 rpm @ 25C)

NOTE: May infringe on an existing patent. Please consult your legal advisor.

SOURCE: Ajinomoto USA, Inc.: Suggested Formulation #29-0707-B

Cheek Rouge

	Wt%
A. Amihope LL	15.0
Nylon Powder	15.0
Titanium Dioxide	10.0
Aluminum Oxide	2.0
Pigment	q.s.
Talc	the rest
B. Dimethylpolysiloxane	2.0

**Procedure:**

1. Mix (A) with a speed mixer.
2. Add (B) to (A), and mix.
3. Sieve them, and press.

**Note:**

This cheek rouge has smooth touch and proper adhesion.

Eye Shadow

	Wt%
A. Sericite	15.0
Mica	10.0
Nylon Powder	15.0
Amihope LL	10.0
Titanium Dioxide	7.0
Pearl Pigment	q.s.
Pigments	q.s.
Talc	the rest
B. Isostearic Acid	2.0

**Procedure:**

1. Mix (A) with a speed mixer.
2. Add (B) to (A), and mix.
3. Sieve them, and press.

**Note:**

This eye shadow has smooth touch and proper adhesion.

SOURCE: Ajinomoto USA, Inc.: Suggested Formulations

Cleansing Emulsion O/W Liquid

	%W/W
I Cutina MD	8.0
Eumulgin B1	1.5
Eumulgin B2	1.5
Eutanol G	10.0
Paraffin oil, high viscous	20.0
II Water	59.0
Formula No. B21-01	

Cleansing Emulsion O/W Liquid

	%W/W
I Cutina MD	4.0
Lanette O	2.0
Eumulgin B1	1.5
Eumulgin B2	1.5
Rilanit GMO	1.0
Cetiol SN	10.0
Paraffin oil, high viscous	25.0
II Water	55.0
Formula No. B21-02	

Cleansing Emulsion O/W Liquid

	%W/W
I Lanette 16	2.0
Siegert Stearin L2SM	3.0
Eumulgin B1	1.5
Eumulgin B2	1.5
Cetiol V	5.0
Cetiol S	15.0
II Triethanolamine	0.2
Water	71.8
Formula No. B21-03	

Cleansing Emulsion

	%W/W
I Lamecreme LPM	10.0
Paraffin oil	2.0
Cegesoft C24	3.0
Eutanol G	3.0
Lanette 16	1.0
Wool fat	1.0
II Lamepon S-TR	3.0
1,2-propylene glycol	5.0
Water	71.7
III Perfume	0.3
Preparation:	

Phase I is brought to 70C and the aqueous phase, also at 70C, is added slowly, stirring thoroughly. May be perfumed after stir cooling to 40C.

Formula No. B21-04

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Compact PowderMaterial/CTFA-Index:

A: Talc	74.00%
Magnesium Stearate	6.00
Carbopol 1342/Carbomer 1342	3.00
B: Wacker-Belsil CM 040/Cyclomethicone	12.00
Nutrilan L/Hydrolyzed Animal Protein	2.00
C: Methyl paraben	0.20
Talc	1.90
Pigments	0.70
Preservative, Fragrances, Pigments	q.s.
Mix A, add B slowly, add C and then mix D into ABC homogenously.	
Formulation 635 AH	

Compact PowderMaterial/CTFA-Index:

A: Talc	25.00%
Kaolin	25.00
Titanium Dioxide	5.00
Calcium Carbonate	10.00
Magnesium Stearate	5.00
Belsil BNP/Boron Nitride	10.00
Zinc Stearate	12.50
B: Isopropyl Myristate	3.50
Oleyl Oleate	4.00
Fragrances, pigments	q.s.
Mix A well, heat B and add it in portions, homogenize thoroughly.	
Formulation 1057 AH	

Nail Varnish Remover

A gentle nail varnish remover with added nourishing ingredients.

Material/CTFA-Index:

Acetone	50.00%
Water	11.00
Wacker-Belsil DMC 6035/Methicone Copolyol Acetate	3.00
Ethyl Acetate	35.00
Diisopropyl Adipate	0.50
Mix all the ingredients together.	
Formulation 987 AH	

SOURCE: Wacker Silicone: Suggested Formulations



**Conditioning Skin Moisturizer**

This lotion moisturizes and softens the skin without leaving a greasy, heavy feel.

<u>Ingredient:</u>	<u>Weight%</u>	<u>Function</u>
<b>Part A:</b>		
Deionized Water	71.00	Diluent
Pemulen TR-1 (1)	0.40	Emulsifier/ Stabilizer
Glycerin	2.00	Humectant
Methyl Paraben	0.10	Preservative
Propyl Paraben	0.10	Preservative
<b>Part B:</b>		
White Petrolatum	1.00	Moisture Barrier
Isopropyl Palmitate	2.50	Emollient
Dimethicone	2.50	Lubricant
Triethanolamine (99%)	0.30	Neutralizing Agent
<b>Part C:</b>		
Distearyldimonium chloride (2)	0.10	Conditioner
Deionized Water	20.00	Diluent
<b>Part D:</b>		
Fragrance	q.s.	
Color	q.s.	

- (1) Acrylates/C10-30 Alkyl Acrylate Crosspolymer (BFGoodrich)  
 (2) Arosurf TA-100 (Sherex Chemical)

**Preparation:**

1. Combine deionized water, glycerin, and parabens in a vessel which will contain the entire formulation. Note: Parabens may be predispersed in glycerin to facilitate dissolution.
2. Disperse the Pemulen into the water mixture with rapid agitation. Allow the solution to mix for approximately 30 minutes. Heat to 70C.
3. Combine Part B ingredients and heat to 70C with mixing.
4. With moderate agitation, add Part B to Part A. Mix for 15-20 minutes.
5. Combine Part C ingredients and add to the emulsion with continued mixing until cool.

**SOURCE:** BFGoodrich Co.: Formula P0023

Cover CreamMaterial/CTFA-Index:

A: Candelilla Wax	5.50%
Belsil SDM 6022/Dimethicone (and) Stearoxy Dimethylsilane (and) Stearoxy Dimethyldisiloxane	6.70
Stearic Acid	3.00
B: Water	45.80
Propylene Glycol	3.40
Triethanolamine	1.30
C: Belsil BNP/Boron Nitride	10.00
Titanium Dioxide	4.00
Pigments	2.00
D: Belsil CM 040/Cyclomethicone	18.30
Preservatives, fragrances	q.s.

Heat A and B each to 70C. Add B to A. Mix C to AB homogeneously. Cool to approx. 30C and add D.

Temperature stability: at 45C over 10 weeks.

Formulation 781 AH

Foundation CreamMaterial/CTFA-Index:

A: Lamecreme KSM/Glyceryl Stearate se	20.00%
Olive Oil	4.00
Belsil BNP/Boron Nitride	3.00
B: Glycerine	4.00
Water	67.50
Belsil PDM 20/Phenylmethicone	1.00
Belsil CM 020/Cyclomethicone	0.50
Preservatives, fragrances, pigments	q.s.

Heat A to 70C, mix B and heat to 65C. Add B into A with high agitation.

Temperature stability: at 45C over 10 weeks.

Formulation 780 AH

SOURCE: Wacker Silicone: Suggested Formulations

Cream Eye Shadow

<u>Ingredients:</u>	<u>Wt. %*</u>
A: Talc	18.00
Vanclay, Kaolin	2.00
Iron Oxides	4.50
Titanium Dioxide	5.50
B: Stearic Acid	0.80
Glyceryl Stearate	2.00
Lanolin	4.00
Sesame Oil	2.00
Olive Oil	1.00
Isopropyl Myristate	3.00
C: Cellulose Gum (CMC 7LF)	0.10
Distilled Water	9.90
D: Veegum, Magnesium Aluminum Silicate	1.75
Distilled Water	33.75
E: Propylene Glycol	5.00
Triethanolamine, 99%	0.40
Darvan No. 1, Sodium Polynaphthalene Sulfonate	0.30
Distilled Water	6.00
F: Preservative, Fragrance	q.s.

Procedure:

Micropulverize ingredients in Part A. Heat Part B to 70C. Prepare cellulose gum solution using the Part C ingredients. Prepare a Veegum dispersion using the Part D ingredients. Combine Parts C and D. Add the combined Part E ingredients and add to Parts C+D. Add Part A pigments to water phase and homogenize. Heat to 60C and maintain temperature for 10 minutes. Add oil phase to water phase and mix until temperature cools to 45C. Add F when cool.

\*As received basis

SOURCE: R.T. Vanderbilt Co., Inc.: Veegum in Color Cosmetics:  
Formula from Aqualon Co.

Cream Foundation

A	Deionized Water	52.00%
	Pecosil WDS-100 (Dimethicone Copolyol Phosphate)	3.00
	Propylene Glycol	5.00
	Magnesium Aluminum Silicate	0.75
	Xanthan Gum	0.25
B	Titanium Dioxide	7.16
	Talc	1.05
	Iron Oxide (yellow)	1.21
	(red)	0.42
	(black)	0.16
C	Pelemol GS (Glyceryl Stearate)	8.00
	Meadowfoam Seed Oil	5.00
	Pelemol OPG (Octyl Pelargonate)	5.00
	Macademia Nut Oil	2.00
	Cetearyl Alcohol	2.00
	Pelemol OP (Octyl Palmitate)	5.00
	Dimethicone (5000 cs)	0.50
D	Triethanolamine (99%)	0.50
E	Propylene Glycol (and) Diazolidinyl Urea (and)	1.00
	Methylparaben (and) Propylparaben	

Procedure:

1. Prewet Magnesium Aluminum Silicate and Xanthan Gum with the Propylene Glycol. 2. Homogenize this slurry into phase A water, and when uniform, homogenize phase B into phase A. 3. When AB is uniform, switch to sweep agitation and add Pecosil WDS-100. 4. With continued sweep agitation, heat AB to 70-75C. 5. Heat phase C to 70-75C with sweep agitation. 6. Homogenize phase C to AB. 7. When ABC is uniform, switch to sweep agitation and add phase D to ABC. 8. Cool to 45C under sweep agitation and then add phase E. 9. Continue sweep agitation while cooling to 35C.

SOURCE: Phoenix Chemical, Inc.: Formula 14-108-B

Cream Lotion O/W with Ginseng Root Extract

	<u>%W/W</u>
I Cutina CBS	8.0
Cutina E24	1.5
Eumulgin B2	1.5
Cetiol SN	8.0
Eutanol G	4.0
Cremogen Ginseng root	1.0
II Henkel Glycerin 86% DAB 9	5.0
Water	71.0

Formula A22-06

Skin Emulsion O/W Low Viscous with Avocado Oil

	<u>%W/W</u>
I Cutina CBS	8.0
Eumulgin B1	1.5
Eumulgin B2	1.5
Cetiol V	5.0
Avocado oil	3.0
II Water	81.0

Formula No. A22-07

Moisturizing Emulsion O/W

	<u>%W/W</u>
I Cutina MD	8.0
Eumulgin B1	1.5
Eumulgin B2	1.5
Eutanol G	10.0
Myritol 318	5.0
Paraffin oil, high viscous	4.0
II Hygroplex HHG	5.0
1,2-propylene glycol	7.0
Water	58.0

Formula No. A23-01

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Creamy Eye Shadow

<u>A</u>	Deionized Water	51.94%
	Pecosil PS-100 (Dimethicone Copolyol Phosphate)	3.00
	Propylene Glycol	5.00
	Magnesium Aluminum Silicate	0.75
	Xanthan Gum	0.25
<u>B</u>	Titanium Dioxide	7.15
	Talc	1.05
	Iron Oxides	1.86
<u>C</u>	Pelemol GS (Glyceryl Stearate)	8.00
	Meadowfoam Seed Oil	5.00
	Pelemol OPG (Octyl Pelargonate)	5.00
	Macademia Nut Oil	2.00
	Cetearyl Alcohol	2.00
	Pelemol OP (Octyl Palmitate)	5.00
	Siltech F-500 (Dimethicone, 500 cs)	0.50
<u>D</u>	Triethanolamine (99%)	0.50
<u>E</u>	Propylene Glycol (and) Diazolidinyl Urea (and)	1.00
	Methylparaben (and) Propylparaben	

Procedure:

1. Prewet Magnesium Aluminum Silicate and Xanthan Gum with the Propylene Glycol. 2. Homogenize this slurry into phase A water, and when uniform, homogenize phase B into phase A. 3. When AB is uniform, switch to sweep agitation and add Pecosil WDS-100. 4. With continued sweep agitation, heat AB to 70-75C. 5. Heat phase C to 70-75C with sweep agitation. 6. Homogenize phase C to AB. 7. When ABC is uniform, switch to sweep agitation and add phase D to ABC. 8. Cool to 45C under sweep agitation and then add phase E. 9. Continue sweep agitation while cooling to 35C.

SOURCE: Phoenix Chemical, Inc.: Formula 14-108-D

**Creamy Lotion Moisturizer**

A creamy, non-greasy lotion with a quick drying cooling sensation. Leaves skin feeling soft, smooth and moisturized.

	Wt%
A. Methyl Paraben	0.25
Carbomer 941 (Goodrich, Carbopol 941)	0.50
Water	65.40
B. Isopropyl Lanolate (Amerchol, Amerlate P)	2.50
Stearyl Alcohol (and) Cetearth-20 (Amerchol, Promulgen G)	3.50
Mink Oil (Emulan, Light Fraction)	5.50
Myristyl Myristate (Van Dyk, Ceraphyl 424)	1.50
Propyl Paraben	0.15
C. Triethanolamine (99%)	0.50
Ethanol (SD 40 Alcohol, 95%)	20.00
Perfume	0.20

**Procedure:**

1. Disperse Carbopol in water, add methyl paraben, then heat Phase A to 75C.
2. Add 75C Phase B to 75C Phase A via propellor agitation.
3. Cool to 45C and add Phase C.

**Moisture Balm**

An analgesic, non-irritating, soothing, moisturizing skin balm. Unique formula combining Lipoprotein, Yeast Extract and Mink Oil with Homomenthyl Salicylate for superior skin benefits.

	Wt. %
A. Isopropyl Palmitate (Amerchol, Propal)	5.0
Mink Oil (Emulan, Light Fraction)	5.0
Homomenthyl Salicylate	5.0
PEG-6 Stearate (and) Glyceryl Stearate (and) Ceteth-20 (Gattefosse, Tefose 2561)	7.5
Cyclomethicone (and) Dimethicone Copolymer (Dow Corning, Q2-3225C)	4.0
B. Water	63.6
C. Hydrolyzed Animal Protein	1.0
Propylene Glycol (and) Yeast Extract (Gattefosse, Vegetol LP)	2.7
PEG-8 (UCC, Carbowax 400)	5.0
Propylene Glycol (and) Diazolidinyl Urea (and) Methyl Paraben (and) Propyl Paraben (Sutton, Germaben II)	1.0
Fragrance	0.2

**Procedure:**

Add 70C Phase B to 65C Phase A via high shear propellor agitation. Stir cool to 35C. Add room temperature Phase C.

**SOURCE:** Emulan, Inc.: Suggested Formulations

Creamy Mascara

Creamy soft.

Material/CTFA-Index:

A: Belsil DM 350/Dimethicone	2.00%
Belsil CM 025/Cyclomethicone	3.00
Cetyl Alcohol	2.00
Stearic Acid	9.90
Vaseline/Petrolatum	5.50
Mineral Oil	4.10
B: Triethanolamine	3.10
Wasser dest./Water	61.30
Pigmente/(Colour)	9.10
Preservatives, perfume	q.s.

Mix A and heat to 60C, stir in B. Add the pigments and work in until a homogeneous mixture is formed.

Temperature stability: at 45C over 10 weeks.

Formulation 195 AH

Mascara

Firm cream.

Material/CTFA-Index:

A: Belsil DM 350/Dimethicone	2.00%
Belsil PDM 200/Phenyldimethicone	4.00
Cetyl Alcohol	5.00
Stearic Acid	19.80
Vaseline/Petrolatum	5.50
Mineral Oil, high viscosity	4.10
B: Triethanolamine	6.20
Water	43.40
C: Pigmente/(Colour)	10.00
Preservatives, perfume	q.s.

Heat A to 60C, add B whilst stirring quickly. Work in C homogeneously.

Temperature stability: at 45C 8 weeks.

Formulation 211 AH

SOURCE: Wacker Silicone: Suggested Formulations



Depilatory Cream O/W

	%W/W
I Lanette N/SX	6.0
II Urea	4.0
Water	74.5
III Gelwhite USP	5.0
Thioglycolic acid 80%	6.0
Lithium hydroxide	4.5

Note: In accordance with the German cosmetics legislation, depilatory creams may contain a maximum of 5% thioglycolic acid and the pH must be <12.65. The pH of this cream is approx. 12.

Preparation: Thioglycolic acid and lithium hydroxide are dissolved or suspended in 20 parts water. Gelwhite is swelled in 20 parts cold water. With the rest of the water, in which the urea has been dissolved, a cream is produced with Lanette N/SX. After the cream has completely cooled down, the active ingredient mixture and the gelwhite solution are added.

Formula No. G11-01

Depilatory Emulsion O/W, High Viscous

	%W/W
I Lanette N	4.0
Eumulgin B3	2.0
II Thioglycolic acid 80%	6.0
Lithium hydroxide	4.5
Urea	4.0
Melamine	2.0
Water	77.5

Preparation: Thioglycolic acid, lithium hydroxide and melamine are dissolved or suspended in half the water. With the rest of the water, in which the urea has been dissolved earlier, a cream or emulsion is produced with the fatty substances. After the cream has cooled down completely, the active ingredient mixture is added to the cream and then perfumed.

Note: In accordance with the German cosmetics legislation, depilatory creams may contain a maximum of 5% thioglycolic acid and the pH must be <12.65. The pH of this emulsion is approx. 12.

Formula No. G21-01

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Eyeliners

	<u>%W/W</u>
I Cutina MD	3.0
Eumulgin B1	1.0
Eutanol G	3.0
Myritol 318	3.0
Pigment colors	10.0
II Luviskol K30	8.0
Ethyl alcohol 96%	5.0
Henkel Glycerin 86% DAB 9	3.0
Veegum solution 6%	20.0
Water	44.0

Preparation: An o/w-type emulsion is produced in the usual way with the fatty substances and half the water. Luviskol K30 is dissolved in the mixture of alcohol and the rest of the water and the pigments are added to this solution. Having cooled down, the emulsion is added gradually to the Luviskol pigment mixture and then the Veegum solution is stirred in. The finished emulsion should be homogenized mechanically.

Formula No. P24-01

Make-up Stick

	<u>Parts</u>
Cutina LM	84.0
Eutanol G	16.0
Pigment colors	15.0
Formula No. P41-01	

Powder Stick

	<u>Parts</u>
Cutina LM	50.0
Eutanol G	10.0
Pigment colors	40.0
Formula No. 41-02	

Cover-up Stick

	<u>Parts</u>
Cutina LM	70.0
Pigment colors	30.0
Formula No. 41-03	

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Eye Make-up Remover, Liquid

	<u>%W/W</u>
Cetiol SN	60.0
Eutanol G	30.0
Paraffin oil, high viscous	10.0
Formula No. B32-01	

Eye Make-up Remover in Gel Form

	<u>%W/W</u>
Cetiol SN	63.0
Paraffin oil, high viscous	30.0
Aerosil 200	7.0
Formula No. B32-02	

Make-up Remover, Surfactant Based

	<u>%W/W</u>
Dehyton G	20.0
Cetiol HE	25.0
Citric acid	0.3
Water	54.7
Formula No. B32-03	

Make-up Remover, Anhydrous

	<u>%W/W</u>
Lanette 16	10.0
Cutina BW	15.0
Vaseline, white	35.0
Wool fat, anhydrous	10.0
Hard paraffin	5.0
Cetiol V	25.0
Formula No. B32-04	

Eye Make-up Removing Stick

	<u>%W/W</u>
Cutina LM	80.0
Paraffin oil, high viscous	10.0
Vaseline, white	10.0
Formula No. B41-01	

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Eye Shadow Stick

	<u>Parts</u>
Cutina LM	72.0
Eutanol G	20.0
Pigment colors	3.0
Timiron Starluster MP 115	15.0
Cosmetic titanium dioxide 300 309	0.5

Formula No. P44-01

Eyeline Pencil

	<u>Parts</u>
Cutina LM	85.0
Ozokerite 70-72C	5.0
Pigment color	10.0

Formula No. P44-02

Eyebrow Pencil

	<u>Parts</u>
Cutina LM	78.0
Ozokerite 70-72C	12.0
Pigment color	10.0

Formula No. P44-03

Make-Up Cream with Pearly Gloss, O/W

	<u>%W/W</u>
I Cutina MD	2.0
Siebert Stearin L2 SM	1.0
Cetiol V	5.0
Paraffin oil, high viscous	10.0
Wool fat, anhydrous	2.0
Pigment colors	8.0
II 1,2-propylene glycol	5.0
Triethanolamine	0.5
Veegum solution 4%	30.0
Water	26.5
III Timiron Starluster MP 115	10.0

Formula P11-04

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Eye Shadow

A. Sericite	15.0%
Mica	10.0
Nylon Powder	15.0
Amihope LL	10.0
Titanium Dioxide	7.0
Pearl Pigment	q.s.
Pigments	q.s.
Talc	the rest
B. Isostearic Acid	2.0

Procedure:

1. Mix (A) with a speed mixer.
2. Add (B) to (A), and mix.
3. Sieve them, and press.

Note:

This eye shadow has smooth touch and proper adhesion.

Face Powder with Amihope LL

A. Talc	q.s. to 100%
Lauroyl Lysine*	5%-30%
Magnesium Stearate	2.5%
Propylparaben	0.05%
Butylparaben	0.05%
Pigments (Titanium Dioxide, Iron Oxides, Ultramarines, etc.)	q.s.
B. Captex 300**	1.0%
Fragrance	q.s.

Charge all phase A ingredients into appropriate blender and mix. Combine phase B liquids and spray or add to blending phase A. After mixing is complete, pulverize well. Very smooth feel with good skin adhesion.

\*Amihope LL(Ajinomoto USA, Inc.)

\*\*Capric/Caprylic Triglycerides(Capital City Products)

Powder Foundation

	Wt%
A. Talc	36.9
Sericite	30.0
Mica	10.0
Magnesium Stearate	1.0
Titanium Dioxide	5.0
Amihope LL	5.0
Pigments	2.1
B. 2-Octyldodecanol	4.0
Dimethylpolysiloxane	6.0

Procedure:

1. Add (A) with speed mixer.
2. Add (B) to (A).
3. Sieve them, and press.

Note:

This powder foundation has light touch.

SOURCE: Ajinomoto USA, Inc.: Suggested Formulations

Eye Shadow Cream O/W

	<u>%W/W</u>
I Siegert Stearin L2 SM	4.0
Cutina MD-A	4.0
Eumulgin B1	1.0
Lanette 16	2.0
Eutanol G	2.0
Isopropyl myristate	4.0
Colorants:	
Pigment colors	1.4
Cosmetic titanium dioxide 300 309	3.6
II Triethanolamine	1.0
1,2-propylene glycol	5.0
Water	67.0
III Timiron Starluster MP 115	5.0
Formula No. P14-01	

Eye Shadow Cream O/W

	<u>%W/W</u>
I Lanette 16	1.0
Siegert Stearin L2 SM	1.0
Eumulgin B1	0.5
Lanette E	0.2
Isopropyl palmitate	5.0
Pigment colors	0.7
Cosmetic titanium dioxide 300 309	1.8
Talc	6.0
Titanium dioxide	1.8
Kaolin	0.6
II Luviskol K30	3.0
Veegum solution 4%	40.0
Water	29.7
III Timiron Starluster MP 115	10.0

Preparation: Phase I is melted, the pigment colors and powders are added and the mass is processed through a colloid or roller mill. The pigment/fat mass is then heated to approx. 80C and the water, in which the Luviskol K30 has been dissolved, stirred in at the same temperature. The emulsion is stir cooled and the Veegum solution is added at 40C. Phase III is added under 30C. Formula No. P14-02

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Face Cleanser, Clear, Liquid

	<u>%W/W</u>
Texapon ASV	30.0
Water	70.0

Note: WAS 9%

Formula No. L69-01

Face Cleanser, Clear, Liquid

	<u>%W/W</u>
Texapon ASV	30.0
Dehyton AB 30	10.0
Sodium chloride	3.0
Water	57.0

Note: WAS 12%

Formula No. L69-02

Face Cleanser

	<u>%W/W</u>
Texapon ASV	20.0
Cetiol HE	2.0
Viscontran HEC 30 000 PR-2% solution	50.0
Perfume, water-soluble	1.0
Water	27.0

Note: WAS approx. 6%, medium viscous

Formula No. L69-03

Cleansing Lotion, Contains Surfactant

	<u>%W/W</u>
Lamepon S	9.4
Nutrilan I	0.5
Monomuls 90-L 12	0.2
Water	89.9

Note: Low viscous, WAS 3%

Preparation: Monomuls 90-L 12 is dissolved in Lamepon S while heat is applied. The remaining ingredients are then added in the order given above. The pH is set to 6.5 with citric acid.

Formula No. L69-04

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Face Mask

Clear yellow, high viscosity. Produces a film on the skin which can be pulled or rubbed off after approx. 10 minutes.

Material/CTFA-Index:

A: Polyviol W 25/140/Polyvinyl Alcohol	10,00%
Ethanol 96%ig/Alcohol(Cosmetic grade)	25,00
B: Water	45,00
Belsil DMC 6035/Methicone Copolyol Acetate	2,00
C: Triethanolamine	3,00
Ethanol 96%ig/Alcohol (Cosmetic grade)	15,00
Preservatives, fragrances, pigments	q.s.

Mix Polyviol W 25/140 and the cosmetic alcohol and stir into B. Heat to approx. 85C in water bath (whilst stirring), until a clear lump-free solution is produced. Cool to at least 40C and add to C whilst stirring.

Temperature stability: at 45C over 10 weeks.

SOURCE: Wacker Silicone: Formulation 313 AH

Gel Exfoliator

Product is a mild scrub due to the inclusion of DC 193 which provides a smooth feel on the skin, while Polytrap 6038 does the scrubbing action by releasing mineral oil (in form of beads) and absorbing at the same time excessive oil from the skin.

Ingredients:

	<u>% by Weight</u>
Water (distilled)	37.56
EDTA Disodium	0.10
Extrapone Witch Hazel	3.00
AMP-95	0.44
Dow Corning 193	3.00
Carbopol 1342 (2% Soln)	50.00
Polytrap 6038	3.00
Suttocide A	0.70
Perf. Rain Forest	0.20

Note: pH should be 5.50-6.50 (correct with AMP, if necessary)

Procedure:

1. Start mixing water and add EDTA, and Witch Hazel and DC 193 and mix to dissolve.
2. Then add slowly Carbopol solution with low speed (to avoid formation of air bubbles).
3. When all Carbopol is in, add AMP-95 to neutralize it and then add slowly Polytrap 6038 to get uniform distribution.
4. In a homogeneous mixture add Suttocide and mix.
5. At the end add the fragrance and slowly mix in.
6. Take a sample for QC and, when approved, pack off product.

SOURCE: Angus Chemical Co.: Angus Product Formulary: Formulation PF-0311 suggested by Dow Corning



Face Mask O/W

	<u>%W/W</u>
I Siegert Stearin L2SM	6.0
II Triethanolamine	0.3
Gelwhite USP	5.0
Water	71.7
III Kaolin	15.0
Titanium dioxide	2.0

**Preparation:**

Gelwhite is stirred while swelling in 30 parts cold water. Siegert Stearin L2SM is melted at 75C and the rest of the water and triethanolamine are stirred in at a temperature of 80C. At 35C, the gelwhite solution as well as kaolin and titanium dioxide are added to the cream.

Formula No. B13-01

Vitamin Face Mask O/W

	<u>%W/W</u>
I Emulgade F	5.0
Carrot oil CLR	3.0
Vitamin F glycerine ester CLR	3.0
II Viscontran MHPC 400	0.2
Water	54.7
III Zinc oxide	10.0
Kaolin	10.0
Almond meal	5.0
Cremogen witch hazel extract	8.0
IV Camphor	0.1
Ethyl alcohol 96%	1.0

**Preparation:**

Viscontran MHPC is swelled in 30 parts cold water. The fatty substances (I) are heated to 75C and the rest of the water is stirred in at a temperature of 80C. At approx. 35C, the Viscontran solution (II), the powder substances, the Cremogen witch hazel extract and the camphor/alcohol solution are added to the cream.

Formula No. B13-02

SOURCE: Henkel KGaA: Cosmetic Model Formulae

**Facial Cleanser**

This cleansing formulation is light, non-greasy and water-rinsable. It provides thorough cleansing without drying the skin.

<u>Ingredient (CTFA):</u>	<u>Weight%</u>	<u>Function</u>
<b>Part A:</b>		
Deionized Water	89.55	Diluent
Cocoamphodiacetate (1)	1.00	Rinsability
Quaternium-15 (2)	0.10	Preservative
Methylparaben	0.10	Preservative
Propylparaben	0.05	Preservative
<b>Part B:</b>		
Isostearyl Benzoate (3)	4.00	Solvent
Dioctyl Maleate (4)	2.00	Solvent
Caprylic/Capric Triglyceride	1.00	Solvent
Octyl Hydroxystearate (5)	1.00	Emollient
Pemulen TR-2 (6)	0.20	Emulsifier
Carbopol 980 (7)	0.60	Thickener
<b>Part C:</b>		
Aminomethyl Propanol (95%) (8)	0.40	Neutralizing Agent

- (1) Miranol C2M Conc. NP (Miranol)
- (2) Dowicil 200 (Dow Chemical)
- (3) Finsolv SB (Finetex)
- (4) Bernel Ester DOM (Bernel Chemical)
- (5) Wickenol 171 (CasChem)
- (6) Acrylates/C10-30 Alkyl Acrylate Copolymer (BFGoodrich)
- (7) Carbomer (BFGoodrich)
- (8) AMP-95 (Angus Chemical)

**Preparation:**

- Combine Part A ingredients in a vessel which will contain the entire formulation. Mix to dissolve parabens.
- Combine Part B ingredients in a separate vessel. Mix to dissolve any soft lumps of Pemulen and Carbopol.
- With moderate agitation, add the Part B slurry to Part A. Mix for 10-20 minutes to allow resins to swell.
- Add Part C and mix vigorously to produce a smooth, white cream.

**SOURCE:** BFGoodrich Co.; Formula P0009

Facial Gel Cleanser  
"The Pastel Collection"  
"Crystal"

A gentle foaming gel cleanser designed to thoroughly deep cleanse and refresh the skin without disturbing the skin's natural moisture balance.

<u>Ingredient/Trade Name:</u>	<u>% by Weight</u>
Part A:	
Deionized Water	50.150
Polyquaternium-10	0.200
Citric Acid	0.100
Tetrasodium EDTA	0.100
Methylparaben	0.150
Sodium PCA/Ajidew N-50	0.500
Part B:	
Sodium Laureth Sulfate	30.000
TEA-Cocoyl Glutamate/Amisoft CT-12	10.000
Cocamidopropyl Betaine	5.000
PEG-150 Distearate	0.700
Lauramide DEA	2.000
Part C:	
Fragrance/#IY-67	0.250
Methylchloroisothiazolinone and Methylisothiazolinone	0.050
Part D:	
Sodium Chloride	0.800

**Procedure:**

Disperse Polymer JR-125 in deionized water. Heat to 70C. Add remaining part A ingredients. Mix until uniform. Add part B ingredients in order. Mix at 70C until completely homogeneous. Cool to 40C. Add part C. Mix well. Add Part D as needed to increase viscosity. Continue mixing and cooling to 35C.

Appearance: Clear liquid

pH: 5.20-5.70

Viscosity: 4,000-6,000 cps

**SOURCE:** Ajinomoto USA, Inc.: Suggested Formulation

**Facial Gel Cleanser**  
**"The Pastel Collection"**  
**"Lavender"**

A gentle foaming gel cleanser designed to thoroughly deep cleanse and refresh the skin without disturbing the skin's natural moisture balance.

<u>Ingredients/Trade Name:</u>	<u>% by Weight</u>
<b>Part A:</b>	
Deionized Water	50.176
Polyquaternium-10	0.200
Citric Acid	0.100
Tetrasodium EDTA	0.100
Methylparaben	0.150
Sodium PCA/Ajidew N-50	0.500
<b>Part B:</b>	
Sodium Laureth Sulfate	30.000
TEA-Cocoyl Glutamate/Amisoft CT-12	10.000
Cocamidopropyl Betaine	5.000
PEG-150 Distearate	0.700
Lauramide DEA	2.000
<b>Part C:</b>	
Lavender Oil/Lavender Fleurs 40/42	0.200
Ext D&C Violet (1% Solution)	0.020
D&C Red No. 33 (1% Solution)	0.004
Methylchloroisothiazolinone and Methylisothiazolinone	0.050
<b>Part D:</b>	
Sodium Chloride	0.800

**Procedure:**

Disperse Polymer JR-125 in deionized water. Heat to 70C. Add remaining part A ingredients. Mix until uniform. Add part B ingredients in order. Mix at 70C until completely homogeneous. Cool to 40C. Add part C. Mix well. Add part D as needed to increase viscosity. Continue mixing and cooling to 35C.

Appearance: Clear lavender liquid

pH: 5.20-5.70

Viscosity: 4,000-6,000 cps (RVT #4 @ 10 rpm @ 25C)

**SOURCE:** Ajinomoto USA, Inc.: Suggested Formulation

Facial Gel Cleanser  
"The Pastel Collection"  
"Marine"

A gentle foaming gel cleanser designed to thoroughly deep cleanse and refresh the skin without disturbing the skin's natural moisture balance.

<u>Ingredient/Trade Name:</u>	<u>% by Weight</u>
<b>Part A:</b>	
Deionized Water	50.187
Polyquaternium-10	0.200
Citric Acid	0.100
Tetrasodium EDTA	0.100
Methylparaben	0.150
Sodium PCA/Ajidew N-50	0.500
<b>Part B:</b>	
Sodium Laureth Sulfate	30.000
TEA-Cocoyl Glutamate/Amisoft CT-12	10.000
Cocamidopropyl Betaine	5.000
PEG-150 Distearate	0.700
Lauramide DEA	2.000
<b>Part C:</b>	
Fragrance/#LK-40	0.200
FD&C Blue No. 1 (1% Solution)	0.004
FD&C Yellow No. 5 (1% Solution)	0.009
Methylchloroisothiazolinone and Methylisothiazolinone	0.050
<b>Part D:</b>	
Sodium Chloride	0.800

**Procedure:**

Disperse Polymer JR-125 in deionized water. Heat to 70C. Add remaining part A ingredients. Mix until uniform. Add Part B ingredients in order. Mix at 70C until completely homogeneous. Cool to 40C. Add part C. Mix well. Add part D as needed to increase viscosity. Continue mixing and cooling to 35C.

Appearance: Clear light green liquid

pH: 5.20-5.70

Viscosity: 4,000-6,000 cps (RVT #4 @ 10 rpm @ 25C)

**SOURCE:** Ajinomoto USA, Inc.: Suggested Formulation

Facial Gel Cleanser  
 "The Pastel Collection"  
 "Rose"

A gentle foaming gel cleanser designed to thoroughly deep cleanse and refresh the skin without disturbing the skin's natural moisture balance.

<u>Ingredient/Trade Name:</u>	<u>% by Weight</u>
Part A:	
Deionized Water	50.193
Polyquaternium-10	0.200
Citric Acid	0.100
Tetrasodium EDTA	0.100
Methylparaben	0.150
Sodium PCA/Ajidew N-50	0.500
Part B:	
Sodium Laureth Sulfate	30.000
TEA-Cocoyl Glutamate/Amisoft CT-12	10.000
Cocamidopropyl Betaine	5.000
PEG-150 Distearate	0.700
Lauramide DEA	2.000
Part C:	
Fragrance/#U-9257	0.200
D&C Red No. 33 (1.0% Solution)	0.007
Methylchloroisothiazolinone and Methylisothiazolinone	0.050
Part D:	
Sodium Chloride	0.800

**Procedure:**

Disperse Polymer JR-125 in deionized water. Heat to 70C. Add remaining part A ingredients. Mix until uniform. Add part B ingredients in order. Mix at 70C until completely homogeneous. Cool to 40C. Add part C. Mix well. Add part D as needed to increase viscosity. Continue mixing and cooling to 35C.

Appearance: Clear pink liquid

pH: 5.20-5.70

Viscosity: 4,000-6,000 cps (RVT #4 @ 10 rpm @ 25C)

SOURCE: Ajinomoto USA, Inc.: Suggested Formulation

Gelled Nail Lacquer Remover

<u>Ingredients:</u>	<u>Weight%</u>	<u>Function</u>
Acetone	72.0	Solvent
Deionized Water	9.5	Diluent
Propylene Glycol	9.5	Lubricant
Carbopol 941 (1)	2.0	Gelling Agent
PEG-15 Cocamine (2)	2.0	Neutralizer
Glycerin	5.0	Lubricant
Color	q.s.	
Fragrance	q.s.	

Procedure:

1. Combine acetone, deionized water, and propylene glycol. Mix thoroughly.
2. Disperse Carbopol 941 into the acetone mixture with moderate agitation. Mix for 30-45 minutes.
3. Reduce agitation and neutralize with PEG-15 Cocamine.
4. Add glycerin, color, and fragrance and mix until well combined

Suppliers:

- (1) BFGoodrich Co.  
 (2) Akzo (Ethomeen C-25)

Formula C0030

Icey Blue Camphorated Skin Gel (Clear)

<u>Ingredients:</u>	<u>Weight%</u>	<u>Function</u>
Part A:		
Water (Deionized)	85.6	Diluent
Carbopol 940	0.9	Gelling Agent
Part B:		
Isopropyl Alcohol	10.0	Solvent for Active
Camphor (Crystals)	0.2	Active
Polysorbate 20	1.0	Surfactant
Triethanolamine (99%)	2.0	Neutralizer
Methyl Parabens	0.2	Preservative
FDYC Blue	0.002	Soluble Dye
Disodium EDTA	0.1	Chelating Agent

Procedure:

1. Slowly sift Carbopol 940 into the vortex of rapidly agitating water when resin is dispersed, reduce agitation, mix until homogenous dispersion is obtained.
2. Separately combine Part B. Add to Part A with moderate sweeping agitation until a clear gel results.

Formula C0031

SOURCE: BF Goodrich Co.: Suggested Formulations

**Gentle Body Polisher**  
(Formula 91-0507)

This elegant body polisher is prepared with mild surfactants and a fine abrasive that results in a mild yet effective body polisher. Its non-alkaline pH and combination of ingredients are designed to cleanse the skin and leave it feeling clean and smooth. The polisher is thick and rich in the package and on your hand but readily thins when sheared, therefore, it dispenses easily.

	<u>% By Weight</u>
Deionized Water	Q.S.
Veegum Ultra (R.T. Vanderbilt)	1.00
Methocel E4M (Dow Chemical)	0.80
Miracare XL	8.50
Hamosyl C (W.R. Grace)	1.00
Sodium Hydroxide (50%)	0.50
Alkamide DL 207/S	2.00
Stearic Acid (Triple Pressed)	1.00
Alkamuls EGMS	1.00
Geropon AC-78/NP	13.00
Acuscrub 50 (Allied Signal)	20.00
Fragrance, Dye(s), Preservative	Q.S.

Blending Procedure: With vigorous agitation disperse Veegum Ultra in Deionized Water and begin heating. When batch has reached 75C, add Methocel E4M, agitate vigorously until dispersed. Decrease agitation to avoid air entrapment. Maintain temperature at 75C and add Miracare XL, Hemosyl C, Sodium Hydroxide (50%), Alkamide DL 207/S, Stearic Acid, Alkamuls EGMS, and Geropon AC-78/NP. After the Geropon AC-78/NP has dissolved begin cooling. Add Acuscrub 50 at 60C. Add Fragrance, Dye(s) and Preservative at 40C.

Note: Fragrance selection may affect pH and viscosity. Viscosity can be adjusted by varying the Methocel E4M level, pH can be adjusted by varying the Sodium Hydroxide level.

Typical Formulation Properties

Appearance:	Opaque, Abrasive Cream	
Viscosity:	Brookfield LV4 @ 25C (12 hours after preparation)	
	@ 0.3 RPM	650,000-750,000 cps
	@ 0.6 RPM	450,000-550,000 cps
	@ 1.5 RPM	250,000-350,000 cps
pH:	6.5-7.5	

CTFA Identification: Water, Oxidized Polyethylene, Sodium Cocoyl Isethionate, DEA-Lauryl Sulfate, Lauramide DEA, Sodium Stearate, Sodium Cocoyl Sarcosinate, Glycol Stearate, Magnesium Aluminum Silicate, DEA-Lauraminopropionate, Sodium Lauramimopropionate, Propylene Glycol, Hydroxypropyl Methylcellulose, Fragrance, Preservative, Dye(s).

**SOURCE:** Rhone-Poulenc Surfactants & Specialties: Formula 91-0507



**Gentle Facial Cleanser & Moisturizer**  
**(Formula 91-0901)**

This elegant, high solids facial cleanser is formulated with mild cleansing agents and moisturizing agents to leave the face clean and moisturized. Its non-alkaline pH has been chosen to match the skin's natural pH. Its rich creamy, pearled appearance conveys its luxurious feel and performance.

	<u>% By Weight</u>
Deionized Water	Q.S.
Hamposyl L-30 (W.R.Grace)	40.00
Rhodafac RS 610	3.00
Sorbitol (70%)	2.10
Glycerin	1.50
Diglycerin (Solvay)	1.50
Alkamuls EGMS	4.00
Cetearyl Alcohol	1.50
Alkamide DIN 295/S	1.00
Mineral Oil	1.00
Beeswax	0.20
Ceresin	0.20
Sodium Borate	0.05
Cheelox 100	0.05
Gerocon AC-78/NP	20.00
Fragrance, Dye(s), Preservative	Q.S.

Blending Procedure: In a side scraped kettle, or other kettle suitable for preparing heavy creams, heat all components except Gerocon AC-78/NP to 75C with gentle agitation to avoid foaming and aeration. Add Gerocon AC-78/NP and maintain at 75C until dissolved. Avoid aeration and foaming. Cool. Add Fragrance, Dye(s) and Preservative at 35C.

While cooling, the product will pass through a very thick phase. However, upon further cooling and mixing, the product will thin.

Note: Viscosity can be adjusted as desired by varying the Alkamuls EGMS level.

Typical Formulation Properties

Appearance:	Pearled, Flowable Cream
pH:	5.7-6.1
Solids:	50%
Viscosity*:	Brookfield LV4 @ 25C
	@ 0.3 RPM 50,000-150,000
	@ 1.5 RPM 25,000-100,000

\* Viscosity reading is function of aeration.

CTFA Identification: Water, Sodium Cocoyl Isethionate, Sodium Lauryl Sarcosinate, Glycol Stearate, Trideceth-6 Phosphate, Cetearyl Alcohol, Sorbitol, Glycerin, Diglycerol, Linoleamide DEA, Mineral Oil, Beeswax, Ceresin, Sodium Borate, Disodium EDTA.

**SOURCE:** Rhone-Poulenc Surfactants & Specialties: Formula

Hair and Skin Moisturizing Spray

A refreshing spray containing special humectants to replenish much needed moisture to hair and skin. Contains Sodium PCA to help restore normal moisture balance and keep the skin young and fresh. Also contains Aloe Vera Gel to soothe dryness, and emollients to condition and protect the skin and hair from drying out. Recommended for use under dry climatic conditions, dry heat or during sun exposure.

<u>Ingredient/Trade Name:</u>	<u>% by Weight</u>
Part A:	
Deionized Water	88.95
Sodium PCA/Ajidew N-50	3.00
Aloe Vera Gel Decolorized 1X	5.00
Dimethicone Copolyol/Dow Corning 193 Surfactant	0.30
Diazolidinyl Urea/Germall II	0.10
Part B:	
Propylene Glycol	2.00
Methylparaben	0.15
Part C:	
TEA-Cocoyl Glutamate/Amisoft CT-12	0.50

Procedure:

Mix Part A ingredients until everything is completely dissolved. Heat Part B to 50 degrees Centigrade and mix until clear. Add Part C. Mix well.

Appearance: Clear colorless, water-thin liquid  
pH: 5.30-5.60

Cheek Rouge

	<u>Wt%</u>
A. Amihope LL	15.0
Nylon Powder	15.0
Titanium Dioxide	10.0
Aluminum Oxide	2.0
Pigment	q.s.
Talc	the rest
B. Dimethylpolysiloxane	2.0

Procedure:

1. Mix (A) with a speed mixer.
2. Add (B) to (A), and mix.
3. Sieve them, and press.

Note:

This cheek rouge has smooth touch and proper adhesion.

SOURCE: Ajinomoto USA, Inc.: Suggested Formulations

**Highly Protective Foundation**

<u>Ingredient:</u>	<u>%W/W</u>
1 Monomuls 90-0 18	2.0
2 Lameform TGI	4.0
3 Cetiol A	10.0
4 Sipol 1618 C50	1.0
5 Beeswax	3.0
6 Zinc stearate	2.0
7 Tioveil TG	10.0
8 Magnesium sulphate	1.0
9 Glycerine	3.0
10 Pigments	q.s.
11 Preservative	q.s.
12 Water	to 100.0

This formulation gives a rich W/O Tinted Foundation Cream with good emollience and high UV protection (SPF approx. 12).

The first seven components are melted together at about 85C. Components 8 & 9 are dissolved in the water and this mixture is then heated to the same temperature as the oil phase. The water phase is then added to the oil phase and dispersed. Mixing should continue down to about 35C. The pigments should be incorporated well, and the product homogenised by Triple Roll Mill.

Formula TS 476

**Water Thin Milk**

<u>Ingredient:</u>	<u>%W/W</u>
1 Eumulgin B2	1.0
2 Cutina E24	2.0
3 Cetiol 1414E	7.0
4 Cutina MD	1.0
5 Sipol 1618 C50	1.0
6 Urea	3.0
7 Glycerine	3.0
8 Preservative	q.s.
9 Water	to 100.0

This formulation gives a water thin O/W skin milk. It would also be suitable for use in a pump dispenser or as an aerosol body mousse.

The first five components are melted together at about 85C. Components 6 & 7 are dissolved in the water and heated to the same temperature as the oil phase. The oil phase is then added to the water phase and dispersed. Mixing should continue down to about 35C.

Formula TS 453

**SOURCE:** Henkel KGaA: Skin Care Project Formulations

**Lasting Strength Nail Toughener**  
**(Keratin Protein Nail Strengthener and Conditioner)**

Nails are made of Keratin protein. Keratin Nail Toughener is applied directly to the nail becoming a part of the nail itself and forming a protective moisture retentive film which enhances the nail's flexibility and durability.

When used regularly, Lasting Strength Nail Toughener will counteract the damaging effects of detergents and other environmental abuse.

Kera-Tein 1000 and Gel-Co are film formers, coating and penetrating into the "pores" of the nail. Kera-tein 1000 AS, a cationic, alcohol soluble Keratin ester will help plasticize the nail and prevent embrittlement due to excessive drying. Lasting Strength Nail Toughener adds a very attractive, natural-looking, healthy sheen to the nails.

<u>Ingredients:</u>	<u>%W/W</u>
Water	59.5
Isopropyl Alcohol	20.0
Kera-Tein 1000 (Hydrolyzed Keratein)	9.2
Kera-Tein 1000 AS (Ethyl Ester of Hydrolyzed Keratin)	10.0
Gel-Co (Gelatin)	1.0
Celquat L 200 (Polyquaternium-4)	0.2
Fragrance	0.1

**Procedure:**

Mix water, gelatin and Celquat and warm to 50C until all in solution. Cool to 40C. Add the rest of the ingredients. Age overnight. Filters clear.

**Directions:**

Remove nail polish. Apply "Dab-O-Matic" over clean, dry nails and under tips. Use twice daily and always after washing.

Applicator and Cap by: Dab-O-Matic, Mt. Vernon, NY

Vial by: Brockway Glass, Parkersburg, WV

SOURCE: Maubrook Inc.: Formula #SK-2401

Light Coverage Foundation

<u>Ingredient:</u>	<u>Wt. %*</u>
A: Deionized Water	59.55
Veegum, Magnesium Aluminum Silicate	1.20
Cellulose Gum (CMC 7MF)	0.60
B: Butylene Glycol	6.00
Triethanolamine, 99%	2.00
Methylparaben	0.30
Diazolidinyl Urea (Germall II)	0.20
C: Glyceryl Stearate	1.00
Isostearic Acid	2.00
Stearic Acid XXX	2.00
Isopropyl Lanolate	5.00
Propylene Glycol Diester	5.00
Propylparaben	0.15
D: Titanium Dioxide	5.62
Iron Oxides	1.38
Talc	8.00

Procedure:

Dry blend the Veegum and Cellulose Gum and add them to the water while mixing with a homogenizer for 20 min. at 5000 rpm. Add the Part B ingredients in the order shown, mixing each for 3 minutes. Add the Part D ingredients and mix for 10 minutes. Begin heating to 75C. Heat the Part C ingredients to 75C. Add Part C to Parts A+B+D and mix 10 minutes. Continue mixing slowly while cooling to room temperature.  
Formula from Sun Chemical Corp.

Eyeliner

Veegum provides thickening and pigment suspension in this formula while insuring smooth application properties. This product can be applied to the eyelid with a brush.

<u>Ingredients:</u>	<u>Wt. %*</u>
A: Veegum, Magnesium Aluminum Silicate	2.5
Deionized Water	75.5
B: PVP (PVP K-30)	2.0
Deionized Water	10.0
C: Iron Oxides	10.0
D: Preservative	q.s.

Procedure:

Slowly add Veegum to the water, while agitating at maximum available shear. Continue mixing until smooth. Dissolve the PVP in water using a little heat. Add B to A and mix until uniform. Add C and mix until smooth and uniform. Add Part D and mix until uniform.

Formula No. 107

\*As received basis

SOURCE: R.T. Vanderbilt Co., Inc.: Veegum in Color Cosmetics:  
Suggested Formulations

Lip Care Stick, Colorless

	<u>Parts</u>
Cutina LM	80.0
Myritol 318	5.0
Cetiol SN	5.0
Formula No. A42-01	

Lip Care Stick, Slightly Tinted, with Pearly Gloss

	<u>Parts</u>
Cutina LM	80.0
Myritol 318	10.0
Colorants:	0.3
Timiron Starluster MP 115	5.0
Formula No. A42-02	

Lip Care Stick with Azulene

	<u>Parts</u>
Cutina LM	85.00
Cetiol SN	15.00
Azulene, purely cryst. 100%	0.02
Formula No. A42-03	

Lip Salve

	<u>Parts</u>
Cutina LM	80.0
Eutanol G	20.0
Formula No. A42-04	

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Lipstick

	<u>Parts</u>
Cutina LM	85.0
Eutanol G	15.0
Pigment colors	4.0
Cosmetic titanium dioxide 300 309	2.0
Formula No. P43-01	

Lipstick, Creamy

	<u>Parts</u>
Cutina LM	72.0
Myritol 318	18.0
Pigment colors	3.0
Cosmetic titanium dioxide 300 309	4.0
Formula No. P43-02	

Lipstick with Pearly Gloss

	<u>Parts</u>
Cutina LM	75.0
Eutanol G	15.0
Pigment colors	3.0
Cosmetic Titanium dioxide 300 309	1.0
Timiron Starluster MP 115	10.0
Formula No. P43-03	

Lipstick, Creamy, With Pearly Gloss

	<u>Parts</u>
Cutina LM	70.0
Myritol 318	20.0
Pigment colors	3.0
Cosmetic Titanium dioxide 300 309	1.0
Timiron Starluster MP 115	10.0
Formula No. P43-04	

Lip Make-up in Cream Form with Pearly Gloss

	<u>Parts</u>
Cutina LM	60.0
Myritol 318	40.0
Pigment colors	1.0
Timiron Starluster MP 115	5.0
Note: Lip gloss: Due to the high oil content, a fatty cream of this type produces increased lip gloss.	
Formula No. P15-01	

SOURCE: Henkel KGaA: Cosmetic Model Formulae

LipstickMaterial/CTFA-Index:

Carnauba	6.00%
Candelilla Wax	5.50
Ozokerite	6.50
Microcrystalline Wax	1.50
Mineral Oil, high viscosity	5.50
Vaseline/Petrolatum	3.00
Wacker-Belsil SM 6018/Stearyl Methicone	5.00
Fluilan/Lanolin Oil	15.00
Castor Oil	31.20
Tegosoft 189/Isooctadecyl Isononanoate	5.00
Wacker-Belsil PDM 1000/Phenyl Dimethicone	3.00
Pigments	12.80

Fragrances, preservatives, flavours q.s.

Mix all ingredients and melt.

Formulation 1212 AH

Lip StickMaterial/CTFA-Index:

Carnauba	6.00%
Candelilla Wax	6.00
Ozokerite	6.00
Microcrystalline Wax	1.50
Mineral Oil, high viscosity	5.50
Vaseline/Petrolatum	3.00
Belsil SDM 6022/Dimethicone (and) Stearoxy Dimethylsilane (and) Stearoxy Dimethyldisiloxane	3.00
Fluilan/Lanolin Oil	15.00
Castor Oil	35.00
Tegosoft 189/Isooctadecyl Isononanoate	5.70
Belsil DM 350/Dimethicone	0.50
Belsil BNP/Boron Nitride	10.00
Pigments	2.80

Preservatives, fragrances q.s.

Mix all ingredients and melt.

Temperature stability: 8 weeks at 45C.

Formulation 778 AH

SOURCE: Wacker Silicones: Suggested Formulations



Liquid Foundation

LQF-102

Ingredients:

	Wt%
A: Stearic Acid	3.0
Isopropyl Myristate	9.0
Liquid Petrolatum	1.5
Cetanol	1.0
Butyl Parahydroxybenzoate	0.1
Color Pigments	8.0
Amihope LL	2.0
B: Triethanolamine	1.5
Water	25.0
C: Propylene Glycol	5.0
Methyl Parahydroxybenzoate	0.1
Water	28.8
D: Bentonite (1%)	15.0

Preparation:

- 1) (A), (B), and (C) are mixed at 80C.
- 2) Add (B), (C), to (A).
- 3) Then add (D) to the former mixture.
- 4) Cool slowly to 40C.
- 5) Stir with homomixer for 5 minutes.
- 6) Cool down to 25C.

Powder Foundation

	Wt%
A. Talc	31.0
Sericite	30.0
Mica	10.0
Magnesium Stearate	1.0
Titanium Dioxide	8.0
Amihope LL	10.0
Pigments	q.s.
B. Isostearic Acid	4.0
Dimethylpolysiloxane	6.0

Procedure:

1. Mix (A) with a speed mixer.
2. Add (B) to (A), and mix.
3. Sieve them, and press.

Note:

This powder foundation has smooth touch and proper adhesion.

SOURCE: Ajinomoto USA, Inc.: Suggested Formulations

Long Wearing Creamy Lipstick

The long wearing characteristics of this lipstick are enhanced by the use of Cetyl Dimethicone in the pigment grind. The Behenoxy Dimethicone contributes both to gloss and to the creamy texture. The C24-28 Alkyl Isostearate Isononanoate provides slip and emolliency.

<u>Ingredients:</u>	<u>%W/W</u>
Phase A:	
Castor Oil	50.05
Octyl Stearate (Tegosoft OS)	3.00
Cetyl Dimethicone (Abil Wax 9801)	1.00
Mineral Oil	9.00
Candelilla Wax	4.35
Carnauba Wax	3.00
Ozokerite	3.00
C24-28 Alkyl Methicone (Abil Wax 9810)	3.15
Behenoxy Dimethicone (Abil Wax 2440)	2.00
Lanolin Alcohol	3.00
BHA	0.05
Phase B:	
Pigments	3.00
Cetyl Dimethicone (Abil Wax 9801)	0.40
Castor Oil	4.00
Phase C:	
Titanium Dioxide (and) Mica	11.00
Phase D:	
Fragrance	Q.S.
Procedure:	

Melt part A together at 80C. Mix. Grind the pigments of Phase B into the oils and waxes of Phase B using a triple roll mill. Add to Phase A. Mix at 80C. Add Phase C. Cool to 55C. Add fragrance. Mold.

SOURCE: Goldschmidt Chemical Corp.: Suggested Formulation

Lip Gloss

	<u>Wt. %</u>
A-C 400 (1)	20.0
Octyl Stearate (2)	52.0
Castor Oil	15.0
Lanolin Alcohol (3)	5.0
Oleyl Alcohol (4)	8.0

Procedure:

Combine all ingredients and heat to 85-90C with agitation until the polyethylene has completely dissolved. Pour into molds and allow to cool.

- (1) Allied-Signal Inc.
- (2) Henkel/Emery Corp.
- (3) Amerchol Corp.
- (4) Croda Inc.

A-C 400 is the gelling agent which provides stability and gloss. In addition, it increases the permanence of the lip gloss film.

SOURCE: Allied-Signal Inc.: Suggested Formulation

Macroemulsion Cleansing Gel

<u>Ingredient:</u>	<u>Weight%</u>
Part A:	
Deionized Water	39.05
Pemulen TR-2 (1) (1.0% solution)	9.00
Hydroxypropyl Methylcellulose (2) (1% solution)	10.00
Triethanolamine (99%)	0.90
Disodium EDTA	0.03
Benzophenone-4	0.02
Part B:	
Mineral Oil (3)	3.00
Isostearyl Benzoate (4)	3.00
Part C:	
Carbopol 980 (5) (2.0% Solution)	30.00
Glycerin	2.20
Hydrogenated Starch Hydrolysate (70%) (6)	2.00
Propylene Glycol (and) Diazolidinyl Urea (and) Methylparaben (and) Propylparaben (7)	0.80
(1) Acrylates/C10-30 Alkyl Acrylate Crosspolymer (BFGoodrich)	
(2) Benecel MP943PR (Aqualon)	
(3) Drakeol 7 (Penreco)	
(4) Finsolv SB (Finetex)	
(5) Carbomer (BFGoodrich)	
(6) Hystar CG (Lonza)	
(7) Germaben II (Sutton)	

SOURCE: BF Goodrich Co.: Formula P0015

Macroemulsion Fragrance Pearl

<u>Ingredient(CTFA):</u>	<u>Weight%</u>	<u>Function</u>
<b>Part A:</b>		
Deionized Water	41.15	Diluent
Pemulen TR-2 (1.0% Solution)	7.50	Emulsifier
Hydroxypropyl Methylcellulose (2) (1.0% Solution)	10.00	Aqueous Film- Former
Tetrasodium EDTA	0.03	Chelant
Benzophenone-4	0.02	U.V. Absorber
Triethanolamine (99%)	0.20	Neutralizing Agent
Diazolidinyl Urea (and) Methylparaben (and) Propylparaben (3)	0.80	Preservative
<b>Part B**:</b>		
Castor Oil	1.80	Fragrance Carrier
Octyl Hydroxystearate (4)	1.80	Emollient
Glyceryl Tribehenate (5)	0.40	Oil Phase Thickener
Pearlescent Pigment (Titanium Dioxide/Mica-based)	0.10-0.20	Visual Appeal
Fragrance Oil	2.00	
<b>Part C:</b>		
Deionized Water	15.00	Diluent
Carbopol 981 (2.0% Solution)	15.00	Thickener/ Stabilizer
Propylene Glycol	2.20	Humectant
Hydrogenated Starch Hydrolysate (70% Solution)	2.00	Humectant

- (1) Acrylates/C10-30 Alkyl Acrylate Crosspolymer (BFGoodrich)  
 (2) Benecel MP943PR (Aqualon)  
 (3) Germaben II (Sutton)  
 (4) Nature Chem OHS (CasChem)  
 (5) Syncrowax HR-C (Croda)  
 (6) Carbomer (BFGoodrich)

**\*\*Combine Castor Oil, Hydroxystearate, and Tribehenate esters.**  
 Heat to 90C. Slowly cool to ambient temperature with agitation,  
 then add pigment and fragrance.

**SOURCE: BFGoodrich Co.: Formula P0016**

Make-Up Emulsion O/W Matting, Liquid

	<u>%W/W</u>
I Cutina KD 16	10.0
Eumulgin B1	1.0
Eutanol G	4.0
Isopropyl myristate	4.0
Paraffin oil, high viscous	3.0
Pigment color	6.0
II Aerosil 200	2.0
Water	70.0
Set to pH 7	
Formula No. P21-01	

Skin Emulsion, Tinted, With Pearly Gloss O/W

	<u>%W/W</u>
I Cutina MD	3.5
Lanette O	1.2
Siebert Stearin L2 SM	2.0
Cholesterin	0.5
Paraffin oil, high viscous	3.0
Pigment colors	2.5
II Luviskol K30	1.5
Allantoin	0.3
1,2-propylene glycol	2.0
Triethanolamine	1.0
Water	77.5
III Timiron Starluster MP 115	5.0
Formula No. P22-01	

Rouge Emulsion, Liquid O/W

	<u>%W/W</u>
I Cutina MD	5.0
Eumulgin B1	1.5
Eumulgin B2	1.5
Eutanol G	5.0
Paraffin oil, high viscous	25.0
Vaseline, white	3.0
Pigment colors	1.0
Cosmetic Titanium dioxide 300 309	2.0
II Veegum solution 5%	25.0
Water	31.0
Preparation: The pigments are mixed with part of the finished emulsion, homogenized and stirred into the rest of the emulsion.	
Formula No. P23-01	

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Mascara

Firm cream.

Material/CTFA-Index:

A: Belsil SDM 6022/Dimethicone (and) Stearoxy Dimethylsilane (and) Stearoxy Dimethyldisiloxane	5.00%
B: Belsil PDM 200/Phenyl Dimethicone	4.00
Cetyl Alcohol	5.00
Stearic Acid	19.00
Vaseline/Petrolatum	5.50
Mineral oil, high viscosity	4.10
C: Triethanolamine	6.00
Water	41.40
Pigmente/(Colour)	10.00
Preservatives, perfume	q.s.

Melt A at 60C, mix in B whilst stirring quickly. Work in C homogeneously.

Temperature stability: at 45C over 10 weeks.

Formulation 212 AH

Mascara

Creamy.

A: Wacker-Belsil SM 6018/Stearyl Methicone	5.00%
Wacker-Belsil PDM 200/Phenyl Dimethicone	4.00
Cetyl Alcohol	5.00
Stearic Acid	7.00
Vaseline/Petrolatum	3.50
Mineral Oil (high viscosity)	4.50
B: Tris Amino/Tromethamine	0.90
Water	60.10
C. Pigments	10.00
Preservatives, Perfume	q.s.

Melt A at 60C, add B with good agitation. Stir pigments into AB homogeneously.

Formulation 1214 AH

SOURCE: Wacker Silicone: Suggested Formulations

**Mascara**

Soft, creamy, spreads easily.

<u>Ingredients:</u>	<u>% by Weight</u>
Part A:	
Belsil SM 6018	5.00
Belsil PDM 200	4.00
Cetyl Alcohol	5.00
Stearic Acid	7.00
Vaseline	3.50
Paraffin oil, viscous	4.50
Part B:	
Tris Amino	0.90
Water	60.10
Part C:	
Pigment	10.00
Preservative, Perfume	q.s.

Formulation PF-0241E suggested by Rezepturen der Wacker-Chemie GmbH, Munchen

**Eye Gel**

<u>Ingredients:</u>	<u>Parts by Weight</u>
Part A:	
Cornflower extract	30.00
Matricaria extract	30.00
Amigel	20.00
Part B:	
Deionized water	SQF 1000
Chamomile water	50.00
Cornflower water	80.00
Part C:	
Bronopol	0.50
Methyl paraben (POBM)	1.00

**Procedure:**

Blend A. Add B and stir. Add C and stir.

Formulation PF-0274E suggested in Soap, Perfumery, Cosmetics; October, 1993 issue

SOURCE: Angus Chemical Co.: Angus Product Formulary

Mild Facial Cleanser

<u>Ingredients:</u>	<u>%w/w</u>
Propylene Glycol	2.00
Butylene Glycol	1.50
Glycerin	0.75
Cocamidopropyl Betaine (Tego Betaine F)	1.50
Dimethicone Propyl PG-Betaine (Abil B 9950)	2.50
Menthol	0.10
Fragrance*	Q.S.
Sodium Lactate (and) Sodium PCA (and) Glycine (and) Fructose (and) Urea (and) Niacinamide (and) Inositol (and) Sodium Benzoate (and) Lactic Acid (Lactil)	0.20
Preservatives	Q.S.
Water	91.40

Procedure:

1. Mix all ingredients in order.
2. If necessary, solubilize the preservatives in the Propylene Glycol and part of the water.

\*If a non-water soluble fragrance is used - it can be solubilized with the addition of PEG-18 Glyceryl Oleate/Cocoate (Antil 171) or PEG-20 Glyceryl Laurate (Tagat L2)

Hot Oil Treatment

<u>Ingredients:</u>	<u>%w/w</u>
Almond Oil	15.0
Rose Hip Oil	5.0
Mineral Oil	56.7
Cetyl Dimethicone (Abil Wax 9801)	1.0
Cetyl Dimethicone (Abil Wax 9814)	0.5
Stearyl Dimethicone (Abil Wax 9800)	0.8
Dimethicone Copolyol (Abil B 8852)	0.5
Phenyl Trimethicone (Abil AV-20)	2.5
Squalene	15.0
Caprylic/Capric Triglycerides (Tegosoft CT)	5.0
Preservatives	Q.S.
Fragrance	Q.S.

Procedure:

Mix ingredients in order.

SOURCE: Goldschmidt Chemical Corp.: Suggested Formulations



Moisturizing Fluid

Pemulen TR-1 allows the ambient temperature emulsification of this light-feeling, glossy lotion. Suitable as a light hand lotion or facial moisturizer, this product exudes a moist, nourishing feel upon application followed by a dry, light after feel. pH is about 5.6.

<u>Ingredient (CTFA):</u>	<u>Weight%</u>	<u>Function</u>
Part A:		
Deionized Water	83.70	Diluent
Hydroxypropyl Methylcellulose (1)	0.10	Aqueous Smoothing Aid
Glycerin	4.00	Humectant
Polysorbate 80 (2)	0.40	Particle Size Reduction
Disodium EDTA	0.10	Chelating Agent
Propylene Glycol (and) Diazolidinyl Urea (and) Methylparaben (and) Propylparaben (3)	0.80	Preservative
Part B:		
Polyglyceryl-10 Decaoleate (4)	4.00	Moisture Barrier
Octyl Hydroxystearate (5)	3.00	Emollient
Isostearyl Benzoate (6)	2.50	Emollient
Dimethicone (1000 c.s.)	0.50	Lubricant
Pemulen TR-1 (7)	0.20	Emulsifier
Carbopol 981 (8)	0.30	Thickener
Part C:		
Triethanolamine (99%)	0.40	Neutralizing Agent

- (1) Methocel E4M Premium (Dow Chemical)
- (2) Tween 80 (ICI Americas)
- (3) Germaben IIE (Sutton Labs)
- (4) Capmul 10G-10-0 (Capital City Products)
- (5) Wickenol 171 (CasChem)
- (6) Finsolv SB (Finetex)
- (7) Acrylates/C10-30 Alkyl Acrylate Crosspolymer (BFGoodrich)
- (8) Carbomer (BFGoodrich)

Preparation:

- Combine Part A ingredients in a vessel which will contain the entire formulation. Methocel is added slowly with rapid agitation.
- Combine Part B ingredients in a separate vessel. Soft lumps of Pemulen and Carbopol should be disrupted with mixing.
- With moderate agitation, add Part B to Part A. Mix for 15-30 minutes to allow polymers to swell. Add Part C and mix vigorously to produce a smooth, glossy lotion.

SOURCE: BFGoodrich Co.; Formula P0008

Natural Cleanser

	Wt%
Distilled Water	75.50
Patlac NAL	0.50
Pationic 138C	8.00
Pationic 122A	2.00
Mineral Oil	8.00
Ritapeg 150 DS	0.50
Rita EGDS	3.00
Methylparaben	0.20
Propylparaben	0.10
Supersat AWS-4	2.00
Sodium Chloride (25%)	0.20

pH: 6.1

Viscosity: 12,500 cps

Stabilities:

4F: no change after 3 cycles

40F: no change after 6 weeks

110F: separation after 2 weeks

Description of System: mineral oil  
no Ritavena 5

Formula 114-6

Natural Cleanser

	Wt%
Distilled Water	80.50
Patlac NAL	0.50
Pationic 138C	8.00
Pationic 122A	2.00
Ritavena 5	3.00
Ritapeg 150 DS	0.50
Rita EGDS	3.00
Methylparaben	0.20
Propylparaben	0.10
Supersat AWS-4	2.00
Kathon CG	0.20

pH: 6.4

Viscosity: 30,500 cps

Stabilities:

4F: no change after 3 cycles

40F: no change after 6 weeks

110F: separation after 3 weeks

Description of System: no oil  
3% Ritavena 5

Formula 114-9

SOURCE: R.I.T.A. Corp.: Ritavena 5 Suggested Formulations

Natural Cleanser

	Wt%
Distilled Water	73.50
Patlac NAL	0.50
Pationic 138C	8.00
Pationic 122A	2.00
Corn Oil	8.00
Ritavena 5	2.00
Ritapeg 150 DS	0.50
Rita EGDS	3.00
Methylparaben	0.20
Propylparaben	0.10
Supersat AWS-4	2.00
Perfume	0.20

pH: 6.3

Viscosity: 12,500 cps

Stabilities:

Freeze/Thaw: no change after 3 cycles

40F: no change after 6 weeks

110F: no change after 6 weeks

Description of System: corn oil/2% Ritavena 5

Foam Testing: Foam H2O

0.0 Minute: 120 95

1.0 Minute: 105 95

3.0 Minutes: 105 95

Formula 111-207

Natural Cleanser

	Wt%
Distilled Water	80.50
Patlac NAL	0.50
Pationic 138C	8.00
Pationic 122A	2.00
Ritavena 5	3.00
Ritapag 150 DS	0.50
Rita EGDS	3.00
Methylparaben	0.20
Propylparaben	0.10
Supersat AWS-4	2.00
Kathon CG	0.20

pH: 6.4

Viscosity: 30,500 cps

Stabilities:

Freeze/Thaw: no change after 3 cycles

40F: no change after 6 weeks

110F: separation after 3 weeks

Description of System: no oil/3% Ritavena 5

Foam Testing: Foam H2O

0.0 Minute: 200 90

1.0 Minute: 200 100

3.0 Minutes: 200 100

Formula 114-9

SOURCE: R.I.T.A. Corp.: RITAVENA 5 Suggested Formulations

**Natural Cleanser with Ritavena 5**

<b><u>Ingredients:</u></b>	<b><u>%W/W</u></b>
Part A:	
1. Distilled Water	63.50
2. Patlac NAL	0.50
3. Pationic 138C	8.00
4. Pationic 122A	2.00
5. Corn Oil	8.00
6. Ritapeg 150 DS	0.50
7. Rita EGDS	3.00
8. Methylparaben	0.20
9. Propylparaben	0.10
10. Supersat AWS4	2.00
Part B:	
11. Distilled Water (100C)	10.00
12. Ritavena 5	2.00
Part C:	
13. Perfume	QS
14. Patlac LA (44% Solution)	QS
15. Sodium Chloride (25% Solution)	QS
16. Glydant	0.20

**Compounding Procedure:**

Heat Part A to 165F with mixing. Mix Part B in a blender for 2 minutes. Add to mixture. Mix until uniform. Begin cooling with a pan of cold water. Cool to 120F. Add perfume. Mix until uniform, avoid aeration. Cool to 90F. Adjust pH with Patlac 44% solution. Adjust viscosity with Sodium Chloride 25% solution. Formula 111-207

**Natural Cleanser with Ritavena 5**

<b><u>Ingredients:</u></b>	<b><u>%W/W</u></b>
Part A:	
1. Distilled Water	60.50
2. Patlac NAL	0.50
3. Pationic 138C	8.00
4. Pationic 122A	2.00
5. Ritapeg 150 DS	0.50
6. Rita EGDS	3.00
7. Methylparaben	0.20
8. Propylparaben	0.10
9. Supersat AWS4	2.00
Part B:	
10. Distilled Water (100C)	20.00
11. Ritavena 5	3.00
Part C:	
12. Perfume	QS
13. Patlac LA (44% Solution)	QS
14. Sodium Chloride (25% Solution)	QS
15. Kathon CG	0.20

**Compounding Procedure:**

Heat Part A to 165F with mixing. Premix Part B in a blender for 2 minutes. Add Part B to Part A. Mix until uniform. Cool to 120F. Add Part C. Adjust pH with Patlac LA (44% Solution). Adjust viscosity with Sodium Chloride (25% Solution). Formula 114-9

SOURCE: R.I.T.A. Corp.: RITAVENA 5 Suggested Formulations

O/W-Cleansing-MilkRecipe:

A	Hostacerin DGL	0.50%
	Polyglyceryl-2 PEG-10 Laurate	
	Hostacerin DGS	3.00%
	Polyglyceryl-2 PEG-4 Stearate	
	Cetyl alcohol	1.00%
	Mineral oil, high viscosity	15.00%
	Cetiol SN	8.00%
	Cetearyl Isononanoate	
	Solulan 98	2.00%
	Polysorbate 80 (and) Cetyl Acetate (and) Acetylated Lanolin Alcohol	
B	Carbopol 980	0.20%
	Carbomer	
C	NaOH (10% in water)	0.80%
	Water	69.20%
	Preservative	q.s.
D	Perfume	0.30%

Procedure:

- |     |                            |    |                          |
|-----|----------------------------|----|--------------------------|
| I   | Melt A at 70C, then add B. | II | Heat C to 70C.           |
| III | Stir II into I.            | IV | Stir until cool.         |
| V   | At 35C add D to IV         | VI | Homogenize if necessary. |
- Formula A VI/4200

Massage-MilkRecipe:

A	Hostaphat KL 340 N	3.00%
	Trilaureth-4 Phosphate	
	Hostacerin DGS	5.00%
	Polyglyceryl-2 PEG-4 Stearate	
	Mineral oil, high viscosity	35.00%
	Isopropyl palmitate	12.00%
	Belsil 350	1.00%
	Dimethicone	
B	Carbopol 980	0.20%
	Carbomer	
C	Glycerine	3.00%
	NaOH (10% in water)	0.80%
	Water	39.70%
	Preservative	q.s.
D	Perfume	0.30%

Procedure:

- |     |                            |    |                          |
|-----|----------------------------|----|--------------------------|
| I   | Melt A at 70C, then add B. | II | Heat C to 70C.           |
| III | Stir II into I.            | IV | Stir until cool.         |
| V   | At 35C add D to IV.        | VI | Homogenize if necessary. |
- Formula A VI/1112

SOURCE: Hoechst: Guide Formulations for Cosmetics & Toiletries

O/W-Moisturizing-MilkRecipe:

A	Hostaphat KL 340 N	1.00%
	Trilaureth-4 Phosphate	
	Hostacerin DGS	4.00%
	Polyglyceryl-2 PEG-4 Stearate	
	Mineral oil, low viscosity	3.00%
	Cetiol V	4.00%
	Decyl Oleate	
	Walnut oil	4.00%
	Isopropyl isostearate	4.00%
	Antioxidant	q.s.
B	Carbopol 980	0.30%
	Carbomer	
C	Aquamollin BC pdr.h.c.	0.10%
	Ethylendiamine Tetraacetic Acid-Sodium Salt	
	Citric acid (10% in water)	0.25%
	Glycerine	3.00%
	NaOH (10% in water)	1.20%
	Water	69.85%
	Preservative	q.s.
D	Collagen KD	5.00%
	Perfume	0.30%

Procedure:

- I Melt A at 70C, then add B. II Heat C to 70C.  
 III Stir II into I. IV Stir until cool.  
 V At 35C add the components of D to IV.  
 VI Homogenize if necessary.  
 Formula A VI/3015

O/W-Skin Milk  
 Free of ethylenoxide

Recipe:

A	Hostacerin DGMS	2.00%
	Polyglyceryl-2 Stearate	
	Mineral oil, low viscosity	8.50%
	Isopropyl palmitate	5.00%
	Soya oil	3.50%
	Antioxidant	q.s.
B	Carbopol 980	0.20%
	Carbomer	
C	Hostacerin LSE	2.50%
	Sucrose Laurate	
	NaOH (10% in water)	0.80%
	Water	77.20%
	Preservative	q.s.
D	Perfume	0.30%

Procedure:

- I Melt A at 80C, then add B. II Heat C to 80C.  
 III Stir II into I. IV Stir until cool.  
 V At 35C add D to IV. VI Homogenize if necessary.  
 Formula A VI/1250

SOURCE: Hoechst: Guide Formulations for Cosmetics & Toiletries

O/W-Skin MilkRecipe:

A	Hostaphat KL 340 N	1.00%
	Trilaureth-4 Phosphate	
	Hostacerin DGS	4.00%
	Polyglyceryl-2 PEG-4 Stearate	
	Mineral oil, high viscosity	8.00%
	Isopropyl palmitate	4.00%
	Cetiol V	3.00%
	Decyl Oleate	
B	Carbopol 980	0.25%
	Carbomer	
C	NaOH (10% in water)	1.00%
	Water	78.45%
	Preservative	q.s.
D	Perfume	0.30%

Procedure:

I	Melt A at 70C, then add B.	II	Heat C to 70C.
III	Stir II into I.	IV	Stir until cool.
V	At 35C add D to IV.	V	Homogenize if necessary.

Formula A VI/1107

O/W-Skin MilkRecipe:

A	Hostacerin DGL	1.00%
	Polyglyceryl-2 PEG-10 Laurate	
	Hostacerin DGS	4.00%
	Polyglyceryl-2 PEG-4 Stearate	
	Mineral oil, low viscosity	5.00%
	Isopropyl palmitate	5.00%
	Almond oil	7.00%
	Avocado oil	4.00%
	Wheat germ oil	2.00%
	Antioxydant	q.s.
B	Carbopol 980	0.20%
	Carbomer	
C	Aquamollin BC pdr. h.c.	0.10%
	Ethylenediamine Tetraacetic Acid-Sodium Salt	
	Citric acid (10% in water)	0.25%
	NaOH (10% in water)	0.80%
	Glycerine	4.00%
	Water	66.35%
	Preservative	q.s.
D	Perfume	0.30%

Procedure:

I	Melt A at 70C, then add B.	II	Heat C to 70C.
III	Stir II into I.	IV	Stir until cool.
V	At 35C add D to IV.	VI	Homogenize if necessary.

Formula A VI/1460

SOURCE: Hoechst: Guide Formulations for Cosmetics &amp; Toiletries

O/W-Skin MilkRecipe:

A	Hostacerin DGL	2.00%
	Polyglyceryl-2 PEG-10 Laurate	
	Hostacerin DGS	4.00%
	Polyglyceryl-2 PEG-4 Stearate	
	Almond oil	20.00%
	Avocado oil	6.00%
	Wheat germ oil	4.00%
	Sesame oil	5.00%
	D-Panthenol	1.00%
	Antioxydant	q.s.
B	Carbopol 980	0.20%
	Carbomer	
C	NaOH (10% in water)	0.80%
	Aquamollin BC pdr. h.c.	0.10%
	Ethylendiamine Tetraacetic Acid-Sodium Salt	
	Citric acid (10% in water)	0.25%
	Allantoin	0.20%
	Glycerine	4.00%
	Water	52.15%
	Preservative	q.s.
D	Perfume	0.30%
I	Melt A at 70C, then add B.	II Heat C to 70C.
III	Stir II into I.	IV Stir until cool.
V	At 35C add D to IV.	VI Homogenize if necessary.

O/W-Skin MilkRecipe:

A	Hostaphat KW 340 N	1.00%
	Triceteareth-4 Phosphate	
	Hostacerin DGS	3.50%
	Polyglyceryl-2 PEG-4 Stearate	
	Shea Butter	1.00%
	Cetiol SN	6.00%
	Cetearyl Isononanoate	
	Walnut oil	5.00%
	Almond oil	4.00%
	Jobba oil	3.00%
	Antioxidant	q.s.
B	Carbopol 980	0.15%
	Carbomer	
C	Allantoin	0.30%
	Aquamollin BC pdr.h.c.	0.10%
	Ethylendiamine Tetraacetic Acid-Sodium Salt	
	Citric acid (10% in water)	0.25%
	Glycerine	4.00%
	NaOH (10% in water)	0.60%
	Water	70.80%
	Preservative	q.s.
D	Perfume	0.30%
I	Melt A at 70C, then add B.	II Heat C to 70C.
III	Stir II into I.	IV Stir until cool.
V	At 35C add D to IV.	VI Homogenize if necessary.
SOURCE: Hoechst: Formula A VI/1453 & Formula A VI/1302		



**O/W-Skin Milk**  
**Manufacturing at room temperature**

**Recipe:**

A	Hostaphat KL 340 N	3.00%
	Trilaureth-4 Phosphate	
	Mineral oil, high viscosity	10.00%
	Isopropyl palmitate	5.00%
B	Carbopol 980	0.45%
	Carbomer	
C	Glycerine	3.00%
	NaOH (10% in water)	1.80%
	Water	76.45%
	Preservative	q.s.
D	Perfume	0.30%

**Procedure:**

- I Mix A and B.  
 II Stir C into I.  
 III Add D to II.  
 IV Homogenize if necessary.  
 Formula A VI/1101

**O/W-Skin Milk**  
**Manufacturing at room temperature**

**Recipe:**

A	Hostacerin DGL	2.00%
	Polyglyceryl-2 PEG-4 Laurate	
	Isopropyl palmitate	4.00%
	Almond oil	5.00%
	Wheat germ oil	1.00%
	Cetiol SN	8.00%
	Cetearyl Isononanoate	
	Antioxydant	q.s.
B	PNC 400	0.40%
	Polyacrylic Acid-Sodium Salt	
C	Aquamollin BC pdr.h.c.	0.10%
	Ethylendiamine Tetraacetic Acid-Sodium Salt	
	Citric acid (10% in water)	0.25%
	Water	78.95%
	Preservative	q.s.
D	Perfume	0.30%

**Procedure:**

- I Mix A and B.  
 II Stir C into I.  
 III Add D to II.  
 IV Homogenize if necessary.  
 Formula A VI/1461

**SOURCE:** Hoechst: Guide Formulations for Cosmetics & Toiletries

Powder Cleanser  
(PW-102)

	<u>Weight%</u>
Amisoft LS-11	11.5
Amisoft CS-11	3.5
Talc	15.0
Sorbitol	20.0
Starch	49.7
Allantoin	0.2
Paraben	0.1

**Procedure:**

Mix each ingredient.

pH 5.0 for a 1wt% solution

Powder Cleanser  
(PW-302)

	<u>Weight%</u>
Amisoft LS-11	23.0
Amisoft CS-11	7.0
Talc	10.0
Sorbitol	20.0
Starch	39.7
Allantoin	0.2
Paraben	0.1

**Procedure:**

Mix each ingredient.

pH 5.0 for a 1wt% solution

Powder Cleanser  
(PW-502)

	<u>Weight%</u>
Amisoft LS-11	38.0
Amisoft CS-11	12.0
Talc	10.0
Sorbitol	20.0
Starch	19.7
Allantoin	0.2
Paraben	0.1

**Procedure:**

Mix each ingredient.

pH 5.2 for a 1wt% solution

SOURCE: Ajinomoto USA Inc.: Suggested Formulations

Powder Cleanser with Amisoft (PW-102)

	Wt%
Amisoft LS-11	11.5
Amisoft CS-11	3.5
Talc	15.0
Sorbitol	20.0
Starch	49.7
Allantoin	0.2
Paraben	0.1

**Procedure:**

Mix each ingredient.

pH 5.0 for a 1 wt% solution

Powder Cleanser with Amisoft (PW-302)

	Wt%
Amisoft LS-11	23.0
Amisoft CS-11	7.0
Talc	10.0
Sorbitol	20.0
Starch	39.7
Allantoin	0.2
Paraben	0.1

**Procedure:**

Mix each ingredient.

pH 5.0 for a 1 wt% solution

Powder Cleanser with Amisoft (PW-502)

	Wt%
Amisoft LS-11	38.0
Amisoft CS-11	12.0
Talc	10.0
Sorbitol	20.0
Starch	19.7
Allantoin	0.2
Paraben	0.1

**Procedure:**

Mix each ingredient.

pH 5.2 for a 1 wt% solution

SOURCE: Ajinomoto USA, Inc.: Suggested Formulations

Pressed Powder

	Wt%
A. Talc	45.0
Nylon Powder	15.0
Sericite	15.0
Mica	5.0
Magnesium Stearate	1.0
Titanium Dioxide	3.0
Pigments	q.s.
B. Isostearic Acid	3.0
Dimethylpolysiloxane	3.0
C. Amihope LL	10.0

Procedure:

1. Mix (A) for 10 min. with a speed mixer.
2. Add (B) to (A), and mix for 10 min.
3. Add (C) to #2, and mix for one min.
4. Sieve them, and press.

Note:

The pressed powder has smooth and light touch.

Face Powder with Amihope LL

	Wt%
A. Talc	q.s to 100
Lauroyl Lysine*	5-30
Magnesium Stearate	2.5
Propylparaben	0.05
Butylparaben	0.05
Pigments (Titanium Dioxide, Iron Oxides, Ultramarines, etc.)	q.s.
B. Captex 300**	1.0
Fragrance	q.s.

Charge all phase A ingredients into appropriate blender and mix. Combine phase B liquids and spray or add to blending phase A. After mixing is complete, pulverize well. Very smooth feel with good skin adhesion.

\* Amihope LL (Ajinomoto USA, Inc.)

\*\* Capric/Caprylic Triglycerides (Capitol City Products)

SOURCE: Ajinomoto USA, Inc.: Suggested Formulations

Pressed Powder

	Wt%
A. Talc	45.0
Nylon Powder	15.0
Sericite	15.0
Mica	5.0
Magnesium Stearate	1.0
Titanium Dioxide	3.0
Pigments	q.s.
B. Isostearic Acid	3.0
Dimethylpolysiloxane	3.0
C. Amihope LL	10.0

Procedure:

1. Mix (A) for 10 min. with a speed mixer.
2. Add (B) to (A), and mix for 10 min.
3. Add (C) to #2, and mix for one min.
4. Sieve them, and press.

Note:

This pressed powder has smooth and light touch.

Liquid Foundation

<u>Ingredients:</u>	Wt%
(A) Stearic acid	3.0
Isopropyl Myristate	9.0
Liquid Petrolatum	1.5
Cetanol	1.0
Butyl Parahydroxybenzoate	0.1
Color Pigments	8.0
Amihope LL	2.0
(B) Triethanolamine	1.5
Water	25.0
(C) Propylene Glycol	5.0
Methyl Parahydroxybenzoate	0.1
Water	28.8
(D) Bentonite (1%)	15.0

Preparation:

- 1) (A), (B), and (C) are mixed at 80C.
  - 2) Add (B), (C), to (A).
  - 3) Then add (D) to the former mixture.
  - 4) Cool slowly to 40C.
  - 5) Stir with homomixer for 5 minutes.
  - 6) Cool down to 25C.
- Formula LQF-102

SOURCE: Ajinomoto USA, Inc.: Suggested Formulations

Pressed Powder with Amihope-LL  
T-01-11-1

Phase A:	Weight%
Talc	Q.S. to 100
Lauroyl Lysine*	30.00
Mica	5.00
Magnesium Stearate	3.00
Propylparaben	0.05
Butylparaben	0.05
Pigments	Q.S.

Phase B:	
Capric/Caprylic Triglycerides	3.00
Perfume	Q.S.

Pressed Powder with Amihope-LL  
T-01-11-1

Phase A:	Weight%
Talc	Q.S. to 100
Lauroyl Lysine*	10.00
Mica	5.00
Magnesium Stearate	3.00
Propylparaben	0.05
Butylparaben	0.05
Pigments	Q.S.

Phase B:	
Capric/Caprylic Triglycerides	3.00
Perfume	Q.S.

**Manufacturing Procedure:**

Charge Phase A ingredients into appropriate blender (tumble blender, ribbon blender, etc.) and mix.

Combine Phase B liquids and spray (with spray nozzle or add to the mix, depending on equipment being used). After complete mixing, pulverize well. Press into pans.

This formula is very smooth and has good skin adhesion.

\*Amihope-LL by Ajinomoto

SOURCE: Ajinomoto USA, Inc.: Formula T-01-11-1

Pressed Powder Blusher with Amihope LL

	<u>Weight%</u>
A. Talc	q.s. to 100
Mica (Coated)*	20.00
Lauroyl Lysine**	10.00
Propylparaben	0.05
Butylparaben	0.05
Pigments (FD&C, D&C, Iron Oxides, Ultramarines, Titanium Dioxide)	q.s.
Magnesium Stearate	2.00
B. Dimethicone	2.50
Captex 300***	1.50
Perfume	q.s.

Pressed Powder Blusher with Amihope LL

	<u>Weight%</u>
A. Talc	q.s. to 100
Mica (Coated)*	20.00
Lauroyl Lysine**	40.00
Propylparaben	0.05
Butylparaben	0.05
Pigments (FD&C, D&C, Iron Oxides, Ultramarines, Titanium Dioxide)	q.s.
B. Dimethicone	2.50
Captex 300***	1.50
Perfume	q.s.

Charge phase A ingredients into appropriate blender and mix. Combine phase B and spray or add to blending phase A. After mixing is complete, pulverize well. Press into pans. Very smooth touch and good skin adhesion. Good pressing characteristics. Durable cake.

\* Mica (Coated) may be sensitive to grinding. If so, do not pulverize Mica (Coated) through fine screen.

\*\* Amihope LL (Ajinomoto Co., Inc.)

\*\*\* Capric/Caprylic Triglycerides (Capital City Products, Inc.)

SOURCE: Ajinomoto USA, Inc.: Suggested Formulations

**Pressed Powder Eye Shadow**  
**(Pearlescent Type)**

<b><u>Ingredients:</u></b>	<b><u>% by Weight</u></b>
(1) Bentonite (NF grade)	5.0
(2) Mearlin-AC	35.0
(3) Kaopolite TLC	29.0
(4) Zinc Stearate (fine ground)	8.0
(5) Magnesium Carbonate	1.0
(6) Acetol	3.0
(7) Polysorbate 20	9.0
(8) Deionized Water	10.0
Preservative	q.s.

**Procedure:**

Dry mix (1), (2), (3), (4), and (5). In separate tank, thoroughly mix (6), (7), and (8). Then slowly add this mixture to the dry mix. Screen through a No. 16 sieve and press.

Follow recommended handling practices of the supplier of each product used.

**Face Mask**

<b><u>Ingredients:</u></b>	<b><u>% by Weight</u></b>
(1) Deionized Water	36.7
(2) Bentonite (NF grade)	8.0
(3) Kaolin USP	40.0
(4) Isopropyl Alcohol	10.0
(5) Lanolin (PEG 50)	0.5
(6) Glyceryl Stearate (Emerest 2000)	1.5
(7) Dimethicone (Dow Corning 200)	1.5
(8) Phenoxyethanol (Emmenessence)	1.5
(9) Methyl Paraben	0.2
(10) Propyl Paraben	0.1

**Procedure:**

Add (2) to (1) and heat to 90C, add (9) and (10) until dissolved. Add (5), (6), (7), and (8). Cool and add (4) with good mixing until dispersed. Add (3) and continue high speed mixing until completely uniform.

Follow recommended handling practices of the supplier of each product used.

Good industrial practices should be used when handling flammable ingredients.

**SOURCE: Kaopolite, Inc.: Suggested Formulations**



Re-Vital Facial Toner

	<u>%W/W</u>
Solulan 98 (Polysorbate 80 (and) Cetyl Alcohol (and) Acetylated Lanolin Alcohol)	3.00
Fragrance	0.20
SD Alcohol 40	30.00
Deionized Water	61.10
Allantoin	0.20
Aqua-Tein C (Collagen Amino Acids (and) Acetamide MEA)	5.00
Pro-Tein ES-20 (Ethyl Ester of Hydrolyzed Collagen)	0.50

The above formula may be modified in the following ways:

1. Increase SD Alcohol for deeper cleansing, more drying effect.
2. By addition of herbal extracts such as Rose Water, chamomile (soothing) (4), soap bark extract (astringent) (3).
3. By addition of essential oils such as menthol & eucalyptus (3) for odor and cooling effect, ginger & lemon (3) for odor and facial feel.

Pre-mix Solulan 98 & Fragrance. Add SD Alcohol 40 to the mixture. Add the rest of the ingredients in order. Mix until each is dissolved.

Mild facial toner which cleans and tightens, but leaves the skin with a healthy, soft after-feel. Aqua-Tein C, a superb humectant, adds skin softening and soothing properties, while reducing the harshness of the alcohol. Pro-Tein ES-20, a cationic ester, leaves a protective, smooth film and serves as an anti-irritant.

Formula #ST-3251

Sun-Rise Fresh Cleansing Gel

	<u>%W/W</u>
A. Deionized Water	27.50
Sodium C14-16 Olefin Sulfonate	40.00
Monamid 150-LW (Lauramide DEA)	3.50
Cocoamphocarboxyglycinate	6.00
Supro-Tein V (TEA-Cocoyl Hydrolyzed Collagen (and) Sorbitol)	10.00
Amino Silk SF (Silk Amino Acids)	3.00
European Elastin-30 (Hydrolyzed Elastin)	3.00
B. Ammonium Chloride	2.00
Deionized Water	5.00
Fragrance, Preservatives, Color	q.s.
Citric Acid	q.s. to pH=6.5
1. Warm Phase A to 50C. Mix until melted & homogeneous.	
2. Adjust pH while warm to pH=6.5.	
3. Predissolve NH4Cl in water. Add carefully to avoid air entrapment.	

A mild cleansing gel, non-drying to the skin. Smooths and softens skin while removing excess skin oil and desquamating skin cells. To use-moisten hands, pour into palm and work up into a creamy luxurious lather. Massage skin in a circular motion with the moisture-laden foam, then rinse thoroughly and dry. The after-feel of the skin is all softness and sheer delight.

Formula #SW-3007

SOURCE: Maybrook Inc.: Suggested Formulations

Rouge Compact Powder

	<u>Parts</u>
Lanette O	6.75
Eutanol G	3.75
Ethyl alcohol 96%	4.50
Magnesium stearate	2.50
Kaolin	17.00
Rice starch	5.00
Magnesium carbonate	2.00
Talc	57.00
Titanium dioxide	5.00
Pigment colors	11.50

Note: This fat/pigment mixture is compressed to form so-called cakes.

The rouge is applied by means of a pencil or a little brush. By varying the colorants according to the cake make-up, this rouge formula can be modified for use as eye shadow, face powder, etc.

Formula No. P81-01

Rouge Stick

	<u>Parts</u>
Cutina LM	85.0
Eutanol G	15.0
Pigment colors	3.0
Cosmetic Titanium colors 300 309	2.0
Formula No. P42-01	

Rouge Stick with Pearly Gloss

	<u>Parts</u>
Cutina LM	72.0
Eutanol G	18.0
Pigment colors	4.0
Timiron Starluster MP 115	6.0
Formula No. P42-02	

Rouge Stick with Pearly Gloss

	<u>Parts</u>
Cutina LM	73.0
Eutanol G	18.0
Pigment colors	3.0
Timiron Starluster MP 115	15.0
Formula No. P42-03	

SOURCE: Henkel KGaA: Cosmetic Model Formulae

**Sand Beige Oil-Free Makeup**

<u>Phase A:</u>	<u>%W/W</u>
Distilled water	30.00
Propylene glycol	8.00
PEG 200 stearate	1.00
Triethanolamine 99%	0.90
Trisodium EDTA	0.20
Veegum magnesium aluminum silicate	1.00
Sodium carboxy methyl cellulose gum	0.25

<u>Phase B:</u>	
Distilled water	30.85
Eastman AQ treated pigment-red	0.40
Eastman AQ treated pigment-yellow	0.80
Eastman AQ treated pigment-black	0.16
Eastman AQ treated pigment-white	6.64

<u>Phase C:</u>	
Talc	5.00
DC3225C cyclomethicone and dimethicone copolyol	9.00
Stearic acid	1.80
Polawax emulsifying wax, NF	1.00
Myverol 18-06 distilled monoglyceride	2.00
Tween 80 polysorbate 60	1.00

Preserve as necessary.

**Procedure:****Phase A:**

1. Slowly sprinkle Veegum into water while mixing.
2. Continue mixing until uniform.
3. Slowly sprinkle sodium carboxy methyl cellulose into water while mixing.
4. Continue mixing until uniform.
5. Add remaining ingredients of (A) and mix well.

**Phase B:**

1. Heat water to 85C, add pigments and mix until well dispersed.
2. Add to Part A and heat combined phases to 70C.

**Phase C:**

1. Combine ingredients and heat with mixing to 70C.
2. At 70C, add to Parts A and B with mixing.
3. Continue mixing and cool to room temperature.

**SOURCE:** Eastman Chemical Co.: Formulation X21138-087

**Silk and Elastin Facial Firming Gel**

	%W/W
A. Deionized Water	51.60
Propylene Glycol	5.00
European Elastin-10 (Hydrolyzed Elastin)	0.50
Carbomer 940 - 2% Aq. Soln.	40.00
Disodium EDTA	0.20
B. Triethanolamine-99%	0.50
C. Silk Pro-Tein (Hydrolyzed Silk)	2.00
Camomile Extract	0.10
Biocare SA (Albumen and Hyaluronic Acid and Dextran Sulfate)	0.10
Preservatives	q.s.
FD&C Yellow #5 (If desired)	q.s.

**Properties:**

Revives, smoothes and moisturizes tired complexions. Moist, supple skin is more elastic and youthful looking. Oil-free formula rehydrates the skin with vital elastin and silk proteins and Hyaluronic Acid.

**Procedure:**

Add Phase B to Phase A. Mix until gelled and clear. Mix slowly to avoid air entrapment. Add Phase C. Mix to incorporate.

Formula #SK-2050

**Honey & Wheat Hydrating Facial/Body Gel**

	%W/W
A. Deionized Water	62.90
Wheat-Tein NL (Hydrolyzed Wheat Protein)	3.00
Honey	1.00
Amphosol CA (Cocamidopropyl Betaine)	5.00
Sipon ESY (Sodium Laureth-1 Sulfate)	20.00
Monamate CPA-40 (Disodium Cocamido MIPA-Sulfo-succinate)	5.00
Monamate 716 (Lauramide DEA)	2.00
Kessco PEG 6000 Distearate (PEG-150 Distearate)	0.50
B. Honey Fragrance	0.30
Quaternium-15	0.30
Amber Color	q.s.

**Procedure:**

Heat phase A with mixing to 70C. Mix until PEG-150 DS is melted and homogeneous. Mix and cool to 50C. Add B. Mix to incorporate.

**Properties:**

Honey and wheat protein are incorporated in this formula to moisturize and hydrate the skin. This bath gel is gentle enough to use as a facial and/or body wash. Opacifying/pearling agents can be added for a pearlescent look.

Formula #SW-3008

SOURCE: Maybrook Inc.: Suggested Formulations

**Skin Conditioning Treatment**  
(Formula 90-0502)

	<u>% By Weight</u>
<u>Water Phase:</u>	
Hi-Care 1000	0.50
Glycerine	2.00
Water	87.40
Alkamuls GMS	3.50
<u>Oil Phase:</u>	
Cetyl Alcohol NF	1.60
Light Mineral Oil	1.50
Dermalcare NI	1.00
Alkamuls MM/M	0.50
Stearic Acid TP	2.00
Fragrance, Dye, Preservative	Q.S.

Blending Procedure: Charge water into mixing vessel followed by the Glycerine. With rapid but smooth agitation, slowly blend in Hi-Care 1000. Heat water system to 70-75C. Slowly blend Alkamuls GMS into heated water base. Maintain 70-75C temperature.

In a separate mixing vessel, combine Oil Phase ingredients and heat to 70-75C until completely molten. With rapid but smooth agitation, slowly blend heated Oil Phase into heated Water Phase. Once system is completely uniform, cool to 40-45C with moderate agitation and add compatible Fragrance, Dye(s) and Preservative.

The formulation will reach its final consistency, a soft lotion, after standing 24 to 48 hours.

**Skin Conditioning Bath & Shower Gel**  
(Formula 91-1110)

	<u>% By Weight</u>
Jaguar C-162	0.3
Miracare MPC	40.0
Citric Acid	Q.S.
Fragrance, Dye(s), Preservative	Q.S.
Sodium Chloride	0.05-0.60
Water	59.3

Blending Procedure: With rapid but smooth agitation, disperse Jaguar C-162 in room temperature water. Once system is uniform, heat water system to 35-40C and then adjust pH to 5.0-6.0 with Citric Acid as needed. Slowly blend in Miracare MPC and mix until uniform. Again, adjust formulation pH to 5.0-6.0 with Citric Acid as needed. Add compatible Fragrance, Dye(s), and Preservative and then adjust formulation viscosity to 14,000-18,000 cps (No. 5 Spindle @ 10 RPM-25C) with the judicious addition of Sodium Chloride as needed.

Typical Formulation Properties:

Appearance @ 25C:	Clear, Viscous Liquid
Viscosity @ 25C:	14,000-18,000 cps
pH:	5.0-6.0
% Non Volatiles:	15-17

SOURCE: Rhone-Poulenc Surfactants & Specialties: Formulas

Skin Emulsion, Matting O/W as Foam Aerosol

	W/W
I Emulgade F	1.00
Emulgade F Spec.	1.00
Cetiol V	1.00
Siebert Stearin L 2SM	3.00
Wool fat, anhydrous	0.50
II Henkel Glycerin 86% DAB 9	1.00
Boric acid	0.25
Triethanolamine	0.25
Water	92.00

Filling: 92 parts emulsion

8 parts propellant 12/114 (40:60)

Note: Due to the boric acid content, the packaging of the finished preparation must bear the inscription "Not to be used for baby care" in accordance with the German cosmetics legislation.

Formula No. A71-01

Nutritive Emulsion, Fat O/W as Foam Aerosol

	W/W
I Emulgade F	4.0
Eutanol G	15.0
Vegetable oil	15.0
II Henkel Glycerin 86% DAB 9	10.0
Water	46.0
III Cremogen witch hazel extract	10.0

Filling: 92 parts emulsion

8 parts propellant 12/114 (40:60)

Preparation: Phase III is added to the resulting emulsion at 40C.

Formula No. A71-02

Foaming Cucumber Juice Emulsion O/W Aerosol-Packed

	%W/W
I Cutina MD	4.0
Eumulgin B1	1.5
Eumulgin B2	1.5
Cetiol V	4.0
Myritol 318	5.0
II Water	81.0
III Extrapon cucumber spec.	3.0

Filling: 92 parts emulsion

8 parts propellant 12/114 (40:60)

Preparation: Phase III is added to the resulting emulsion at approx. 40C.

Formula No. A71-03

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Skin Emulsion O/W with Placenta Extract

	<u>%W/W</u>
I Cutina MD	6.0
Eumulgin B1	1.5
Eumulgin B2	1.5
Eutanol G	10.0
Myritol 318	5.0
Paraffin oil, high viscous	5.0
Placenta liquid, oil-soluble	2.5

II Water 68.5

Formula No. A22-01

Skin Emulsion O/W with Vitamin

	<u>%W/W</u>
I Cutina MD	5.0
Lanette 16	2.0
Eumulgin B1	1.5
Eumulgin B2	1.5
Cetiol LC	12.0
Cetiol S	4.0
Vitaplant CLR, oil-soluble	2.0

II Henkel Glycerin 86% DAB 9 5.0  
Water 65.0

III Vitaplant CLR, water-soluble 2.0

Formula No. A22-02

Skin Emulsion O/W

	<u>%W/W</u>
I Cutina CBS	7.00
Forlanit E	0.50
Eumulgin B1	2.00
Cetiol V	5.00
Paraffin oil, high viscous	5.00

II Triethanolamine 0.09  
Water 80.41

Formula No. A21-14

SOURCE: Henkel KGaA; Cosmetic Model Formulae

Skin Emulsion O/W With Collagen

	%W/W
I Cutina MD	9.0
Eumulgin B1	1.5
Eumulgin B2	1.5
Cetiol V	10.0
Myritol 318	5.0
Isopropyl palmitate	5.0
II 1,2-propylene glycol	5.0
Water	58.0
III Collagen	5.0

Note: pH setting 3.7 to 6.5

Preparation:

Phase III is added to the resulting emulsion at approx. 35C.  
Formula No. A22-03

Cucumber Juice Emulsion O/W

	%W/W
I Cutina MD	8.0
Eumulgin B1	3.0
Eutanol G	3.0
Myritol 318	5.0
II Water	78.0
III Extrapon cucumber spec.	3.0

Preparation:

Phase III is added to the resulting emulsion at 40C.  
Formula No. A22-04

Herbal Emulsion O/W

	%W/W
I Cutina MD	8.0
Eumulgin B1	1.5
Eumulgin B2	1.5
Cetiol LC	8.0
Isopropyl Myristate	4.0
Arnica oil CLR	3.0
Calendula oil CLR	3.0
II Henkel Glycerin 86% DAB 9	5.0
Water	66.0
Formula No. A22-05	

SOURCE: Henkel KGaA: Cosmetic Model Formulae



Skin Gel

This gel is a light, greaseless moisturizer which exhibits sparkling clarity and quick application.

<u>Ingredient:</u>	<u>Weight%</u>	<u>Function</u>
<b>Part A:</b>		
Deionized Water	83.30	Diluent
Glycerin	2.50	Humectant
Hydrogenated Starch Hydrolysate (70%) (1)	2.50	Humectant
Methylparaben	0.10	Preservative
Carbopol 980 (2)	0.60	Gellant
<b>Part B:</b>		
Deionized Water	10.00	Diluent
Triethanolamine (99%)	0.50	Neutralizing Agent
DMDM Hydantoin (3)	0.30	Preservative
PVP (K30)	0.10	Conditioner
Disodium EDTA	0.05	Gel Protectant
(1) Hystar CG (Lonza)		
(2) Carbomer (BFGoodrich)		
(3) Glydant (Lonza)		

Preparation:

1. Using agitation, dissolve methylparaben in a mixture of the first three Part A ingredients. When solution is homogeneous, slowly sift Carbopol 980 into the vortex of the agitated solution. When resin is dispersed, reduce agitation and mix until a homogeneous dispersion is obtained.
2. In a separate vessel, blend Part B ingredients. Mix until homogeneous.
3. Using paddle-type agitation, add Part B to Part A. Mix to produce a clear gel.

Formula C0019

Skin Gel

This gel is a light, greaseless moisturizer which exhibits sparkling clarity and quick application.

<u>Ingredient:</u>	<u>Weight%</u>	<u>Function</u>
<b>Part A:</b>		
Deionized Water	83.30	Diluent
Glycerin	5.00	Humectant
Methylparaben	0.10	Preservative
Carbopol 980 (1)	0.60	Gellant
<b>Part B:</b>		
Deionized Water	10.00	Diluent
Triethanolamine (99%)	0.50	Neutralizing Agent
DMDM Hydantoin (2)	0.30	Preservative
PVP (K30)	0.10	Conditioner
Disodium EDTA	0.05	Gel Protectant
Benzophenone-4	0.05	Gel Protectant
Color	q.s.	Colorant
(1) Carbomer (BFGoodrich)		
(2) Glydant (Lonza)		

Formula C0032

SOURCE: BF Goodrich: Suggested Formulations

Skin Hydrating Moisture Trap

	%W/W
A. Deionized Water	43.30
Sorbitol-70%	2.00
Glycerin	2.00
Carbopol 934, 2% Aq. Soln. (Carbomer 934)	35.00
Methylparaben	0.30
Propylparaben	0.15
Tetrasodium EDTA	0.05
Collagen Hydrolyzate Cosmetic 55 (Hydrolyzed Collagen)	2.00
B. Acetulan (Cetyl Acetate (and) Acetylated Lanolin Alcohol)	5.00
Sesame Oil	4.00
Maywax P (Emulsifying Wax, N.F.)	2.50
Arlacel 165 (Glyceryl Stearate (and) PEG-100 Stearate)	1.00
Proto-Lan 8*	1.50
Lanolin Alcohol	0.50
C. Triethanolamine-99%	0.70
*(Lecithin (and) Butyl Stearate (and) Cocoyl Hydrolyzed Collagen (and) Oleoyl Sarcosine (and) Sesame Oil (and) Lanolin Alcohol)	

**Procedure:**

1. Heat Phases A and B separately to 70C.
2. Add Phase A to Phase B at 70C with adequate mixing.
3. Add Phase C immediately. Mix to incorporate.
4. Mix and cool to 35C.

**Properties:**

A light, creamy, nice looking and stable emulsion. Highly emollient, but not greasy. A good all-around hand and face lotion. Proto-Lan 8 is an excellent non-greasy, protective emollient, based on naturally occurring essential fatty acids and lipo-proteins. Maywax P is an efficient, non-ionic self-emulsifying wax. Collagen Hydrolyzate Cosmetic 55 is a non-occlusive film former which moisturizes and protects the skin.

SOURCE: Maybrook Inc.: Formula #SK-2023

Skin Oil

	<u>%W/W</u>
Cetiol or Eutanol G318	30.0
Myritol 318	30.0
Paraffin oil, high viscous	40.0
Formula No. A31-01	

Skin Oil

	<u>%W/W</u>
Cetiol LC	25.0
Myritol 318	30.0
Isopropyl Palmitate	25.0
Paraffin oil, high viscous	20.0
Formula No. A31-02	

Skin Oil

	<u>%W/W</u>
Cetiol LC	20.0
Myritol 318	45.0
Isopropyl Palmitate	30.0
Oil of St. John's wort CLR	3.0
Carrot oil CLR	2.0
Formula No. A31-03	

Skin Care Oil

	<u>%W/W</u>
Eutanol G	40.0
Myritol 318	35.0
Vitamin oil Biocorno	20.0
Oil of St. John's wort CLR	4.0
Carrot oil CLR	1.0
Formula No. A31-04	

Functional Skin Oil

	<u>%W/W</u>
Eutanol G	40.0
Isopropyl Myristate	30.0
Myritol 318	27.0
Epidermin in oil	0.5
Wheat germ oil spec.	2.5
Formula No. A31-05	

SOURCE: Henkel KGaA: Cosmetic Model Formulae

**Sparkling Skin Moisturizing Fluid With Microcapsules**

This is a fluid containing attractive moisturizing beads in a light, greaseless aqueous base which exhibits sparkling clarity and smooth feel.

<u>Ingredient:</u>	<u>Weight%</u>	<u>Function</u>
<b>Part A:</b>		
Deionized Water	83.35	Diluent
Glycerin	2.50	Humectant
Hydrogenated Starch Hydrolysate (70%) (1)	2.50	Humectant
Methylparaben	0.10	Preservative
Carbopol 981 (2)	0.25	Gellant
<b>Part B:</b>		
Deionized Water	10.00	Diluent
Sodium Hydroxymethyl Glycinate (3)	0.30	Neutralizing Agent/Preservative
PVP (K30)	0.10	Conditioner
Disodium EDTA	0.05	Gel Protectant
Benzophenone-4	0.05	Gel Protectant
<b>Part C:</b>		
Mineral Oil in Gelatin Microcapsules (4)	0.80	Moisturizing Agent

- (1) Hystar CG (Lonza)
- (2) Carbomer (BFGoodrich)
- (3) Suttocide A (Sutton Labs)
- (4) Red and Blue Nuggets (Ronald T. Dodge Co.)

**Preparation:**

- Using agitation, dissolve methylparaben in a mixture of the first three Part A ingredients. When solution is homogeneous, slowly sift Carbopol 981 into the vortex of the agitated solution. When resin is dispersed, reduce agitation and mix until a homogeneous dispersion is obtained.
- In a separate vessel, blend Part B ingredients. Mix until homogeneous.
- Using paddle-type agitation, add Part B to Part A. Mix to produce a clear fluid.
- Using paddle-type agitation, add Part C to neutralized fluid until microcapsules are well dispersed.

**SOURCE:** BF Goodrich Co.: Formula C0035

Sports Gel

Colourless gel with a slightly greasy effect.

Material/CTFA-Index:

A: Mineral Oil, high viscosity	50.00%
Wacker-Belsil SM 6018/Stearyl Methicone	3.00
B: Camphor	5.00
Methyl Salicylate	5.00
C: Wacker HDK H15/Silica	7.00
D: Wacker-Belsil DM 0.65/Dimethicone	30.00
Colours	q.s.

Heat A to approx. 60°C, mix B into A. Add C, work D into ABC.

Formulation 1291/2 AH

Body PowderMaterial/CTFA-Index:

A: Belsil BNP/Boron Nitride	5.00%
HDK N 20/Silica	2.50
HDK H 20/Silica	2.50
Talc	4.00
Starch	30.20
Kaolin	10.00
Magnesium Stearate	1.00
Bentone 38/Quaternium-18 Hectorite	1.00
B: Isopropyl Myristate	6.00
Perfume	1.80
Pigments	q.s.

Mix A well, add B in portions, homogenize thoroughly.

Formulation 1056 AH

SOURCE: Wacker Silicone: Suggested Formulations

Sprayable Moisturizer

This novel moisturizer is a pumpable product which provides a fine spray for quick and easy application. It is an ideal after bath alternative to greasy baby oil.

<u>Ingredient (CTFA):</u>	<u>Weight%</u>	<u>Function</u>
Part A:		
Deionized Water	79.83	Diluent
Glycerin	6.00	Humectant
DMDM Hydantoin (1)	0.30	Preservative
Methylparaben	0.10	Preservative
Propylparaben	0.05	Preservative
Part B:		
Mineral Oil (2)	10.00	Moisture Barrier
Octyldodecyl Stearoylstearate (3)	3.00	Emollient
Oleth-10 (4)	0.40	Particle Size Reduction
Pemulen TR-2 (5)	0.12	Emulsifier/ Stabilizer
Part C:		
Triethanolamine (99%)	0.10	Neutralizing Agent
Part D:		
Disodium EDTA	0.10	Chelating Agent and Viscosity Adjustment

- (1) Glydant (Lonza)
- (2) Drakeol 7 (Penreco)
- (3) Ceraphyl 847 (Van Dyk)
- (4) Brij 96 (ICI Americas)
- (5) Acrylates/C10-30 Alkyl Acrylate Crosspolymer (BF Goodrich)

Preparation:

1. Combine Part A ingredients in a vessel which will contain the entire formulation. Parabens may be predispersed in glycerin to accelerate dissolution. Mix until parabens have dissolved.
2. Combine Part B ingredients in a separate vessel. Mix to disrupt any soft agglomerates of Pemulen.
3. With moderate agitation, add Part B to Part A. Mix for 10-15 minutes to allow resin to swell. Add Part C and use vigorous mixing to produce a smooth, white emulsion. Add Part D incrementally until a viscosity of 600-900 cps is obtained.

SOURCE: BF Goodrich Co.: Formula P0010

**Sprayable Moisturizing Milk**

This light, milky white, low viscosity emulsion delivers a fine mist from a pump sprayer and provides a silky feeling to the skin.

<u>Ingredient:</u>	<u>Weight%</u>	<u>Function</u>
Part A:		
Deionized Water	70.45	Diluent
NaOH (18%)	0.15	Neutralizing Agent
Part B:		
Propylene Glycol Isoceteth-3 Acetate (1)	10.00	Humectant
Pemulen TR-2 (2)	0.15	Emulsifier
Glycerol Triisostearate (3)	4.00	Emollient
Isostearyl Isostearate (4)	4.00	Emollient
Cyclomethicone (5)	10.00	Lubricant
Fragrance (6)	0.20	
Part C:		
Propylene Glycol (and) Diazolidinyl Urea (and) Methylparaben (and) Propylparaben (7)	1.00	Preservative
Part D:		
Disodium EDTA	0.05	Chelating Agent

- (1) Hetester PHA; Bernel Chemical Co., Inc.
- (2) Acrylates/C10-30 Alkyl Acrylate Crosspolymer; BFGoodrich
- (3) Prisorine GTIS; Unichema International
- (4) Prisorine ISIS; Unichema International
- (5) Dow Corning 344 Fluid; Dow Corning Corp.
- (6) Noville #27986; Noville, Inc.
- (7) Germaben II-E; Sutton Laboratories, Inc.

**Procedure:**

1. Combine Part B ingredients at room temperature in a vessel which will contain the final product, breaking up any agglomerated particles.
2. Add Part A to Part B and mix using rapid agitation for 15 minutes.
3. Add Part C to the emulsion.
4. Use Part D to adjust viscosity downward to a range of 600 cps to 1000 cps.

**Properties:**

Appearance: Milky White  
 Viscosity: 910 cps\*  
 pH: 6.0  
 Stability: No separation-10C to 25C Five cycles  
               35 Days (50C) viscosity 840 cps\*  
 \*Brookfield RVT 20 rpm spindle #2

SOURCE: BF Goodrich Co.; Formula P0041

Stick for Skin Impurities

	<u>%W/W</u>
Lanette 16	5.0
Cutina BW	30.0
Cutina CP	20.0
Eutanol G	25.0
Paraffin oil, high viscous	9.2
Powder colorant	3.0
Menthol	0.3
Sulfur, precipitated	2.0
Bactericide	0.5
Zinc oxide	5.0

Preparation:

The fatty substances are melted on the water bath and menthol is dissolved in the fat melt. Zinc oxide, sulfur and powder colorant are then added. At a temperature of approx. 40C, the compound is rolled several times, melted again and cast in moulds. It is advantageous to cool the moulds slightly.  
Formula No. C41-01

Stick for Skin Impurities

	<u>%W/W</u>
Cutina LM	70.2
Cetiol LC	8.0
Eutanol G	8.0
Menthol	0.3
Bactericide	0.5
Sulfur, precipitated	2.0
Zinc oxide	5.0
Powder colorant	6.0

Formula No. C41-02

Emulsion, Liquid, for Skin Impurities O/W

	<u>%W/W</u>
I Lanette N/SX	3.0
Menthol	0.3
Bactericide	0.5
Salicylic acid	0.4
Titanium dioxide	2.0
Pigment color	1.0
II Bioschwefel-Fluid	2.0
Water	90.8

Preparation:

Pigment color, titanium dioxide and sulfur are mixed with 15 parts water and twice rolled. The rest of the water is added and heated to approx. 70C. Lanette N is melted on the water bath at 70C and menthol as well as salicylic acid are dissolved in the fat melt. The aqueous phase is then added and after brief stirring the emulsion produced is homogenized several times by recirculation.

Formula No. C21-01

SOURCE: Henkel KGaA: Cosmetic Model Formulae



**Vitamin E and Wheat Active Daily Facial Moisturizer**

	<b>%W/W</b>
A. Deionized Water	45.40
Carbopol 940-2% Aq. Sol'n (Carbomer 940)	35.00
Wheat-Tein NL (Hydrolyzed Wheat Protein)	3.00
Tween 20 (Polysorbate 20)	1.50
B. Arlacel 60 (Sorbitan Stearate)	1.50
Petrolatum	2.00
Wheat Germ Oil	2.00
Sesame Oil	3.00
Cetyl Alcohol	1.00
Arlacel 165 (Glyceryl Stearate (and) PEG-100 Stearate)	1.00
Isopropyl Palmitate	3.00
Shea Butter	1.00
C. Tocopheryl Acetate	0.10
Triethanolamine-99%	1.00
Preservatives, Fragrance	q.s.

**Procedure:**

Heat Phases A & B separately to 80C. Add Phase B to A at 80C with agitation. Mix until smooth. Add Phase C carefully to avoid aeration.

**Properties:**

This elegant, vegetable-based moisturizer rubs in completely, leaving a soft after feel. Vegetable oils and Petrolatum normalize the skin lipids. Wheat-Tein NL binds moisture and leaves a non-occlusive protective film. Vitamin E Acetate acts as an antioxidant to reduce free radicals in the skin.

Formula #SK-2010

**Gelled Makeup Remover**

	<b>%W/W</b>
Mineral Oil, Light	80.9
Paraffin Wax (143/145)	6.5
Ozokerite Wax #871 Beaded	9.5
Petrolatum	2.0
Propyl Paraben	0.1
Camilol (Alpha-Bisabolol)	0.2
Proto-Lan 8	0.5
Vitamin E	0.1
Fragrance	0.2
Color: Red dye in Neobee M-5	q.s. to light pink

**Procedure:**

Melt all components together except Fragrance and Vitamin E. Mix and cool. Add Fragrance & Vitamin E. Fill off.

**Properties:**

A mild and soothing oil-based make-up remover in convenient gelled form.

Formula #SW-3240

SOURCE: Maybrook Inc.: Suggested Formulations

Water-in-Oil Luxurious Makeup

This formula is a cold process water-in-oil emulsion stabilized by Veegum which also controls the viscosity and insures uniform color throughout the product. This is a moisturizing makeup for dry skin.

<u>Ingredient:</u>	<u>Wt. %*</u>
A: Veegum, Magnesium Aluminum Silicate	1.20
Deionized Water	37.90
Magnesium Sulfate	0.40
B: Talc	5.50
Vanclay, Kaolin	1.50
Titanium Dioxide	5.00
Iron Oxides	3.00
C: Mineral Oil	15.00
Hydrogenated Polisobutylene (Polysynlane)	8.00
Mineral Oil (and) Lanolin Alcohol (Ritachol)	8.00
Isopropyl Lanolate (and) Lecithin (Lanapene)	7.00
Sorbitol, 70%	5.00
Oleamide DEA (Witcamide 511C)	2.50
D: Preservative	q. s.

Procedure:

Slowly add Veegum to the water, while agitating at maximum available shear. Continue mixing until smooth. Add the magnesium sulfate and mix until smooth. Grind Part B and add to Part A, mixing until uniform. Add Parts A+B to Part C. Mix until uniform and smooth. Add Part D and mix until uniform.

\*As received basis

SOURCE: R.T. Vanderbilt Co., Inc.: Veegum in Color Cosmetics:  
Formula No. 332

Protective Skin Gel

<u>Ingredients:</u>	<u>%W/W</u>
A: Liquid lanolin fraction	12.00
Ethoxylated Lanolin wax	2.50
Mineral oil	50.48
Olive oil, USP	20.00
Arlacel 80	5.00
Butylated hydroxytoluene	0.02
B: Colloidal silicon dioxide	10.00

Procedure:

Heat (A) with stirring until homogeneous. Remove heat and add (B) with high shear agitation. Mill if necessary at room temperature.

SOURCE: ICI Surfactants: Suggested Formula

**W/O-Cleansing-Milk****Recipe:**

A	Hostacerin WO	2.00%
	Polyglyceryl-2 Sesquiisostearate (and) Beeswax (and)	
	Microcrystalline Wax (and) Mineral Oil (and) Magnesium	
	Stearate (and) Aluminum Stearate	
	Arlacel 989	2.00%
	PEG-7 Hydrogenated Castor Oil	
	Amerchol L-101	3.00%
	Mineral Oil (and) Lanolin Alcohol	
	Mineral oil, high viscosity	15.00%
	Eutanol G	10.00%
	Octyldodecanol	
	Tocopherol acetate	0.50%
	B-Carotin	q.s.
B	Aquamollin BC pdr.h.c.	0.10%
	Ethylendiamine Tetraacetic Acid-Sodium Salt	
	Citric acid (10% in water)	0.25%
	D-Panthenol	0.50%
	Sodium chloride	2.00%
	Water	64.35%
	Preservative	q.s.
C	Perfume	0.30%

**Procedure:**

- I Melt A at 80C.  
 II Stir the solution of B into I at room temperature.  
 III Stir until cool.  
 IV At 35C add C to III.  
 Formula A VI/4300

**W/O-Skin Milk****Recipe:**

A	Hostacerin WO	2.00%
	Polyglyceryl-2 Sesquiisostearate (and) Beeswax	
	(and) Microcrystalline Wax (and) Mineral Oil	
	(and) Magnesium Stearate (and) Aluminum Stearate	
	Arlacel 989	2.00%
	PEG-7 Hydrogenated Castor Oil	
	Mineral oil, low viscosity	15.00%
	Isopropyl palmitate	5.00%
	Eutanol G	5.00%
	Octyldodecanol	
B	Sodium chloride	2.00%
	Water	68.70%
	Preservative	q.s.
C	Perfume	0.30%

**Procedure:**

- I Melt A at 80C.  
 II Stir the solution of B into I at room temperature.  
 III Stir until cool.  
 IV At 35C add C to III.  
 Formula A VI/2202

SOURCE: Hoechst: Guide Formulations for Cosmetics & Toiletries

# **Section V**

## **Creams**

**Alpha Hydroxy Cream with Soluble Collagen**

	<b>%W/W</b>
A. Deionized water	68.50
Veegum K (Magnesium Aluminum Silicate)	1.00
B. Methylparaben	0.20
Amino Collagen-25 (Collagen Amino Acids)	2.00
Propylene Glycol	3.00
Glycerin	2.00
C. Arlacel 165 (Glyceryl Stearate and PEG-100 Stearate)	2.00
Petrolatum	1.00
Cetyl Alcohol	2.00
Dow Corning 200 Fluid (Dimethicone)	0.20
Propylparaben	0.10
Maywax P (Emulsifying Wax, NF)	3.00
Polysorbate 80	1.50
Finsolv TN (C12-15 alkyl benzoate)	3.00
D. Lactic Acid, 88%	4.00
E. Triethanolamine 99%	1.50
F. Collagen Native Extra 1% (Soluble Collagen)	5.00

**Procedure:**

Disperse Veegum in water. Heat to 80C. Add B to A. Heat C to 80C. Add C to A/B at 80C. Mix and cool to 60C. Add D. Add E. Adjust pH as necessary to 3.5 to 4.0 with TEA. Mix and cool to 30C. Add F.

**Properties:**

This Alpha Hydroxy Cream gently exfoliates, smooths and re-texturizes the skin. Appears to diminish fine facial lines. Helps to rejuvenate the skin for a more youthful appearance. Collagen Native Extra 1% and Amino Collagen-25 act to hydrate the skin and also reduce fine facial lines. Pleasant, non-greasy, fragrance free.

**Note:** Avoid contact with eyes, eyelids or mucous membranes.

**SOURCE:** Maybrook Inc.; Formula #SK-2100

### Anti-Wrinkle Treatment Cream

An elegant white creamy emulsion delivering Rovisome-AHA (Lactic Acid) to the skin.

<u>Ingredients:</u>	<u>%W/W</u>	<u>Function</u>
1. Rita Cetearyl Alcohol (50/50)	2.50	Emulsification
2. Steareth-2	2.50	Emulsification
3. Steareth-21	1.50	Emulsification
4. PPG-15 Stearyl Ether	3.00	Emollient
5. Dioctyl Adipate	3.00	Emollient
6. Dioctylcyclohexane	2.00	After Feel
7. Cyclomethicone (Dow DC 245)	2.00	Spread
8. Dimethicone (Abil 300)	0.50	Feel
9. Hybrid Sunflower Seed Oil	4.00	Emollient
10. Distilled/Deionized Water	68.40	---
11. 1,3 Butylene Glycol	4.00	Coupling
12. Xanthan Gum (Keltrol CG-T)	0.30	Stability
13. Rovisome-AHA (Lactic Acid)	6.00	Liposome
14. Methylidibromo Glutaronitrile and Phenoxyethanol	0.30	Preservative

#### Compounding Procedure:

Disperse item 12 in water and butylene glycol mixture. In separate beaker heat items 1-9 to 70C. Heat water phase to 70C and add to oil phase. Then homogenize and cool to 35C. Add Rovisome and preservative.

Ref. No. 119-121

### Anti-Ageing Treatment Cream

An emulsifier free formula with Rovisome ACE designed to provide nourishment to skin to help eliminate wrinkles.

<u>Ingredients:</u>	<u>%W/W</u>	<u>Function</u>
1. Rita Cetearyl Alcohol (50/50)	1.00	Fatty Emollient
2. Babassu Oil	5.00	Feel
3. Polydecene	10.00	Coating
4. Cetearyl Isononanoate	5.00	Dry Time
5. Distilled/Deionized Water	67.20	---
6. Acrylates/C10-30 Alkyl Acrylate Crosspolymer (Pemulen TR-1)	0.40	Stability
7. Tetrasodium EDTA	0.10	Stability
8. Glycerine	5.00	Humectant
9. Methylidibromo Glutaronitrile (and) Phenoxyethanol	0.30	Preservative
10. Sodium Hydroxide @ 10%	q.s.	pH Control
11. Rovisome ACE (Vitamin Blend)	6.00	Nourishment

#### Compounding Procedure:

Disperse item 6 in water. Add item 7 and heat to 60C. In a separate beaker heat items 1-4 to 60C and add to water phase under stirring. Then homogenize. Neutralize to pH 6.2-7.0 with item 10. Cool to 35C. Add premixed 8,9 and 11.

Ref. No. 119-122

SOURCE: R.I.T.A. Corp.: Skin Care Formulary

**Balanced Emollient Cream**

<u>Ingredient:</u>	<u>%W/W</u>
1 Eumulgin B2	3.0
2 Cetiol SN	10.0
3 Cetiol SB45	5.1
4 Monomuls 60-35	5.0
5 Sipol 1618 C50	2.2
6 Preservative	q.s.
7 Water	to 100.0

This formulation gives an O/W emollient cream.

The first five components are melted together at about 85C. The water is heated to the same temperature as the oil phase. The oil phase is then added to the water phase and dispersed. Mixing should continue down to about 35C.  
Formula TS 477

**Replenishing Emollient Cream**

<u>Ingredient:</u>	<u>%W/W</u>
1 Eumulgin B2	3.0
2 Cegesoft C24	10.0
3 Cetiol SB45	5.1
4 Monomuls 60-35	5.0
5 Sipol 1618 C50	2.2
6 Preservative	q.s.
7 Water	to 100.0

This formulation gives an O/W emollient cream.

The first five components are melted together at about 85C. The water is heated to the same temperature as the oil phase. The oil phase is then added to the water phase and dispersed. Mixing should continue down to about 35C.  
Formula TS 478

**Hand and Body Cream**

<u>Ingredient:</u>	<u>%W/W</u>
1 Eumulgin B2	3.0
2 Cetiol A	10.0
3 Cetiol SB45	5.1
4 Monomuls 60-35	5.0
5 Sipol 1618 C50	2.2
6 Preservative	q.s.
7 Water	to 100.0

This formulation gives an O/W emollient cream.

The first five components are melted together at about 85C. The water is heated to the same temperature as the oil phase. The oil phase is then added to the water phase and dispersed. Mixing should continue down to about 35C.  
Formula TS 479

**SOURCE: Henkel KGaA: Skin Care Project Formulations**

Balanced Emollient Cream

<u>Ingredient:</u>	<u>%W/W</u>
1 Eumulgin B2	3.0
2 Cetiol LC	10.0
3 Novata AB	5.1
4 Monomuls 60-35	5.0
5 Lorol C16	1.1
6 Lorol C18	1.1
7 Preservative	q.s.
8 Water	to 100.0

This formulation gives an exceptionally smooth O/W emollient cream.

The first six components are melted together at about 85C. The water is heated to the same temperature as the oil phase. The oil phase is then added to the water phase and dispersed. Mixing should continue down to about 35C.

Formula TS 480

Light Cleansing Cream

<u>Ingredient:</u>	<u>%W/W</u>
1 Eumulgin B2	3.0
2 Rilanit PC	10.0
3 Novata AB	5.1
4 Monomuls 60-35	5.0
5 Lorol C16	1.1
6 Lorol C18	1.1
7 Preservative	q.s.
8 Water	to 100.0

This formulation gives an O/W emollient cream.

The first six components are melted together at about 85C. The water is heated to the same temperature as the oil phase. The oil phase is then added to the water phase and dispersed. Mixing should continue down to about 35C.

Formula TS 481

Replenishing Moisture Cream

<u>Ingredient:</u>	<u>%W/W</u>
1 Cutina FB25	4.0
2 Cutina CBS	8.0
3 Eutanol G	11.0
4 Paraffin oil	5.0
5 KOH (20%)	1.5
6 Glycerine	5.0
7 Preservative	q.s.
8 Water	to 100.0

This formulation gives an O/W skin cream.

The first four components are melted together at about 85C. Components 5 & 6 are dissolved in the water, which is then heated to the same temperature. The oil phase is then added to the water phase and dispersed. Mixing should continue down to about 35C.

Formula TS 482

SOURCE: Henkel KGaA: Skin Care Project Formulations



**Barrier Cream****Ingredients:**

	<u>%</u>
Phase A:	
H <sub>2</sub> O, Deionized	34.50
Glycerin	25.00

## Phase B:

Petrolatum, White	25.00
Product SE-100 (Glyceryl Stearate & PEG-100 Stearate)	6.00
Hest MS (Myristyl Stearate)	3.00
Hetol CS (Cetearyl Alcohol)	2.50
Hest CSO (Cetearyl Octanoate)	2.50

## Phase C:

Germaben II

**Specifications:**

pH: 5.75

Appearance: White, heavy non-flowable cream

**Procedure:**

- 1) In separate stainless steel kettles, add Phase A and Phase B and heat to 75C while mixing.
- 2) At 75C, add Phase B to A and mix until homogeneous.
- 3) Cool to 45C, while mixing and add Phase C. Mix well.

Formula HC93-115-3

**Moisture Cream****Ingredients:**

	<u>%</u>
Phase A:	
H <sub>2</sub> O, Deionized	76.00
Hetoxide G-26 (Glycereth-26)	4.00

## Phase B:

Hest MS (Myristyl Stearate)	4.50
Hest IS-2-0 (Isosteareth-2 Octanoate)	9.00
Hetoxol D (Cetearyl Alcohol & Cetareth-20)	5.50

## Phase C:

Germaben II	1.00
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**Procedure:**

- 1) In separate stainless steel kettles, add Phase A and Phase B.
- 2) Heat to 75C while mixing.
- 3) Add Phase B to Phase A. Mix until homogeneous.
- 4) Cool to 40C and add Phase C. Mix until uniform.

Formula HC 93-118-5

SOURCE: Heterene, Inc.: Suggested Formulas

Body CreamMaterial/CTFA-Index:

A: Teginacid/Glyceryl Stearate (and) Ceteareth-20	6.00%
Isopropyl Myristate	1.00
Belsil DM 350/Dimethicone	1.00
Mineral Oil, low viscosity	4.00
Lanette O/Cetearyl Alcohol	1.00
B: Water	73.50
Glycerine	1.50
C: Belsil CM 040/Cyclomethicone	10.00
Belsil BNP/Boron Nitride	2.00
Preservatives, fragrances, perfumes	q.s.
Heat A and B each to 65-70C, stir B into A, stir C into AB.	
Temperature stability: at 45C over 10 weeks.	
Formulation 912 AH	

Emollient Cream

White firm cream, easily spread

Material/CTFA-Index:

A: Arlacel 165/Glyceryl Stearate se	5.00%
Arlamol E/PPG-15 Stearyl Ether	3.00
Cetyl Alcohol	5.00
Wacker-Belsil PDM 1000/Phenyldimethicone	2.50
Wacker-Belsil SDM 6022/Dimethicone (and) Stearoxy Dimethylsilane (and) Stearoxy Dimethyldisiloxane	2.50
B: Sorbitol 70%ige Lsg/Sorbitol	10.20
Water	71.30
Preservative, fragrances, pigments	q.s.
Heat A to 70C, heat B to 72C. Stir B into A.	
Formulation 709 AH	

SOURCE: Wacker Silicone: Suggested Formulations

Hand Cream

(O) Liquid Paraffin (#70)	10.0wt%
Cetyl Alcohol	5.0
Nikkol WCB	5.0
Isopropyl Myristate	5.0
Glyceryl Monostearate (Self Emulsifying Type)	2.9
Polyoxyethylene (20) Cetyl Ether	2.1
(W) Ajidew N-50	3.0
Water	67.0
Preservative	q.s.

Procedure:

1. Heat (O) and (W) to 80C.
  2. Add (W) and (O) slowly with stirring.
  3. Cool to 40C with stirring.
- pH: 5.2

SOURCE: Ajinomoto USA, Inc.: Suggested Formulation

Care Cream O/W

	<u>%W/W</u>
I Cutina MD	16.0
Eumulgin B1	1.5
Eumulgin B2	1.5
Cetiol V	10.0
Myritol 318	10.0
II Henkel Glycerin 86% DAB 9	5.0
Water	56.0

Note: Fattening, medium soft consistency  
Formula No. A12-04

Universal Care Cream O/W

	<u>%W/W</u>
I Cutina MD	18.0
Eumulgin B1	1.5
Eumulgin B2	1.5
Eutanol G	20.0
II Henkel Glycerin 86% DAB 9	5.0
Cremogen witch hazel extract	5.0
Triethanolamine	1.0
Water	48.0

Note: Medium-fattening, soft consistency  
Formula No. A12-05

Care Cream O/W

	<u>%W/W</u>
I Lanette 16	1.5
Siebert Stearin L2SM	12.0
Eutanol G	12.0
Myritol 318	6.0
Cutina BW	2.0
Wool fat, anhydrous	3.0
Paraffin oil, high viscous	5.0
II Henkel glycerin 86% DAB 9	6.0
Triethanolamine	1.5
Water	51.0

Note: Fattening, medium soft consistency, particularly easy to apply  
Formula No. A 12-06

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Cleansing Cream

This formulation is a dual purpose makeup remover and skin conditioner.

Phase A:	%W/W
Myverol 18-06 hydrogenated soy glyceride	6.00
Stearic acid, USP/NF	4.00
Petrolatum, USP	10.00
Drakeol 9 mineral oil	10.00
Isopropyl myristate	10.00
SF 18 (350) silicone fluid (dimethicone)	2.00

Phase B:	
Distilled water	q.s. to 100
Propylene glycol, USP	5.50
Triethanolamine 99%, USP	0.70

Phase C:	
Eastman vitamin E 6-81 (vitamin E acetate)	0.30

Phase D:	
Fragrance	q.s.
Preservative	q.s.

**Procedure:**

1. Combine ingredients and heat Phase A and Phase B separately to 80C, mixing until each phase is uniform.
2. Add Phase B to Phase A with propeller mixing.
3. Continue mixing and slowly cool to 50C.
4. Add Phase C with mixing and when uniform add Phase D.
5. Continue mixing and cool to room temperature.
6. Adjust agitation speed throughout process as needed. Inversion will occur at 32C, and cream will become smooth and white.

pH: 7.71

SOURCE: Eastman Chemical Co.: Formulation X21139-007

Cleansing Cream

	Wt%
(O) Liquid Paraffin (#70)	21.0
Petrolatum	5.0
Beeswax	10.0
Lanolin Alcohol	1.7
Polyoxyethylene (5) Glyceryl Isostearate	4.0
Polyoxyethylene (5) Stearyl Ether	2.5
Polyethylene Glycol (500) Distearate	1.6
Sorbitan Monolaurate	0.2
Sorbitan Monooleate	0.4
Aluminum Monostearate	2.0
(W) Ajidew N-50	3.0
Propylene Glycol	3.0
Water	45.6
Preservative	q.s.

**Procedure:**

1. Suspend aluminum monostearate to liquid paraffin.
2. Add other (O) ingredients to the suspension.
3. Heat (O) to 95C to dissolve.
4. Heat (W) to 85C.
5. Add (W) to (O) slowly with stirring.
6. Cool to 40C with stirring.

pH: 5.1

Cleansing Cream

	Wt%
(O) Liquid Paraffin (#70)	35.0
Paraffin Wax (mp 42-44C)	10.0
Squalane	2.0
Isopropyl Palmitate	3.0
Cetyl Alcohol	1.0
Nikkol WCB	10.0
Sorbitan Monostearate	2.4
Polyoxyethylene (15) Cetyl Ether	2.6
(W) Ajidew T-50	3.0
Water	31.0
Preservative	q.s.

**Procedure:**

1. Heat (O) and (W) to 80C.
2. Add (W) to (O) slowly with stirring.
3. Cool to 40C with stirring

pH: 5.7

SOURCE: Ajinomoto USA, Inc.: Suggested Formulations

Cleansing Cream

<u>Ingredient:</u>	<u>%W/W</u>
1 Eumulgin B2	1.5
2 Eumulgin B1	1.5
3 Cutina MD	3.0
4 Cetiol MM	5.0
5 Sipol 16 18 C50	3.0
6 Myritol 318	8.0
7 Paraffin oil	11.0
8 White Soft Paraffin	14.0
9 Preservative	q.s.
10 Water	to 100.0

This formulation gives a rich moisturising O/W skin cream.

The first eight components are melted together at about 85C. The water is then heated to the same temperature. The oil phase is then added to the water phase and dispersed. Mixing should continue down to about 30C.

The product will only achieve its optimum viscosity, if mixing is continued until the product has cooled down.  
Formula TS 491

Cleansing Cream

<u>Ingredient:</u>	<u>%W/W</u>
1 Eumulgin B2	1.5
2 Eumulgin B1	1.5
3 Cutina MD	3.0
4 Cetiol MM	5.0
5 Sipol 16-18 C50	3.0
6 Myritol 318	8.0
7 Paraffin oil	11.0
8 White Soft Paraffin	14.0
9 Glycerine	5.0
10 Preservative	q.s.
11 Water	to 100.0

This formulation gives a rich moisturising O/W skin cream.

The first eight components are melted together at about 85C. Component 9 is dissolved in the water, and this mixture is then heated to the same temperature. The oil phase is then added to the water phase and dispersed. Mixing should continue down to about 30C. The product will only achieve its optimum viscosity, if mixing is continued until the product has cooled down.  
Formula TS 492

SOURCE: Henkel KGaA: Skin Care Project Formulations

Cleansing Cream O/W

	<u>%W/W</u>
I Lanette 16	2.0
Cutina MD	14.0
Eumulgin B1	1.5
Eumulgin B2	1.5
Cetiol LC	7.0
Paraffin oil, high viscous	15.0
II Water	59.0
Formula No. B11-01	

Cleansing Cream W/O

	<u>%W/W</u>
I Dehymuls K	20.0
Cetiol V	10.0
Myritol 318	10.0
Vaseline, white	20.0
II Water	40.0
Formula No. B11-02	

Cleansing Cream W/O

	<u>%W/W</u>
I Dehymuls F	12.0
Vaseline, white	35.0
Paraffin oil, low viscous	15.0
Microwax HP 67	2.0
II Henkel Glycerin 86% DAB 9	5.0
Magnesium sulfate-7-hydrate	0.3
Water	30.7
Formula No. B11-03	

Washing Cream O/W

	<u>%W/W</u>
I Lanette N/SX	8.0
Eutanol G	5.0
II Comperlan KM	10.0
Texapon CS Paste	10.0
Citric acid	0.1
Water	66.9
Formula No. B12-01	

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Cream for Skin Impurities O/W

	<u>%W/W</u>
I Lanette N/SX	15.0
Salicylic acid	0.4
Menthol	0.3
Bactericide	0.5
Rice starch	5.0
Powder colorant	1.0
Titanium dioxide	2.0
Sulfur, precipitated	2.0
II Water	73.8

**Preparation:**

Rice starch, powder colorant, titanium dioxide and sulfur are mixed with 15 parts water and twice rolled. The remaining water is heated together with above mixture to approx. 70C. Lanette N is melted on the water bath at 70C and menthol and salicylic acid are dissolved in the fat melt. The aqueous phase is then added and after brief stirring the cream produced is homogenized several times by recirculation.

Formula No. C11-01

Cream for Skin Impurities, Transparent, in Gel Form O/W

	<u>%W/W</u>
I Eumulgin B3	14.0
Cetiol HE	20.0
Eutanol G	5.0
Menthol	0.1
Bactericide	0.2
II Allantoin	0.2
Water	60.5

**Procedure:**

Eumulgin B3 and the fatty substances are melted on the water bath at 95C and menthol is dissolved in the fat melt. The water, in which allantoin has been dissolved earlier, is also added to the fat melt at a temperature of 95C. The gel produced is cooled whilst stirring and the perfume is added at 60C. Stirring is continued while the gel is cooling down, but should be terminated after a short while to avoid air pockets. In order to obtain a gel with the desired transparency, it is essential to observe the temperature specified.

Formula No. C11-02

SOURCE: Henkel KGaA: Cosmetic Model Formulae



Cream with Placenta Extract W/O

	%W/W
I Dehymuls K	30.0
Cetiol V	7.0
Beeswax	2.0
Vegetable oil	6.0
Placenta liquid, oil soluble	2.0
II Water	53.0
Formula No. A15-04	

Rejuvenating Cream O/W

	%W/W
I Cutina KD 16	12.0
Eumulgin B1	1.0
Eutanol G	10.0
Isopropyl Myristate	6.0
Vitamin oil	4.0
Placenta liquid, oil-soluble	3.0
II Henkel Glycerin 86% DAB 9	5.0
Water	59.0
Set pH to 7	
Note: Soft consistency, easy to apply	
Formula No. A15-05	

Skin Cream O/W with Collagen

	%W/W
I Cutina MD	16.0
Eumulgin B2	3.0
Eutanol G	10.0
II 1,2-Propylene glycol	5.0
Water	61.0
IIICollagen	5.0

Note: pH setting 3.7 to 6.5

Preparation: Heat I to 75C, stir II into I at approx. 80C.

Add III to the cream at 35C.

Formula No. A15-06

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Day Cream

Soft cream with good absorption and non-greasing properties.

Material/CTFA-Index:

A: Eumulgin B2/Ceteareth-20	5.00%
Lanette N/Cetearyl Alcohol (and) Sodium Cetearyl Sulfate	4.00
Stearic Acid	12.00
Eutanol G/Octyldodecanol	3.80
Wacker-Belsil DM 350/Dimethicone	4.00
Wacker-Belsil SM 6018/Stearyl Methicone	5.00
B: Glycerine	4.00
Triethanolamine	0.80
Water	61.40

Preservatives, fragrances, pigments q.s.

Heat A and B each to 70C. Stir B into A.

Formulation 1362 AH

Day Cream

Cream with good absorption and non-greasing properties.

Material/CTFA-Index:

A: Eumulgin B2/Ceteareth-20	5.00%
Lanette N/Cetearyl Alcohol (and) Sodium Cetearyl Sulfate	4.00
Stearic Acid	12.00
Eutanol G/Octyldodecanol	3.80
Wacker-Belsil DM 350/Dimethicone	4.00
Wacker-Belsil SM 6018/Stearyl Methicone	5.00
Eusolox 6300/Methylbenzylidene Camphor	2.50
B: Glycerine	4.00
Triethanolamine	0.80
Wacker-Belsil DMC 6038/Dimethicone Copolyol	2.00
Water	56.90

Preservatives, pigments, fragrances q.s.

Heat A and B each to 70C. Stir B into A.

Formulation 1399 AH

SOURCE: Wacker Silicone: Suggested Formulations

Day Cream

Soft white cream with a silky shine. Absorbed quickly.

Material/CTFA-Index:

A: Stearic Acid	14.00%
B: Propylene Glycol	6.00
Triethanolamine	1.50
Water	72.50
C: Ethanol 96%ig/Alcohol (Cosmetic grade)	2.50
Belsil DM 100/Dimethicone	1.50
Belsil CM 040/Cyclomethicone	2.00
Preservatives, fragrances, pigments	q.s.

Melt the stearic acid at approx. 65-70C, mix B and heat to approx. 70C. Work A into B whilst stirring quickly. Slowly add C.

Temperature stability: at 45C over 10 weeks.

Formulation 190 AH

Hand Cream

White, creamy. Easily spread, quickly absorbed.

Material/CTFA-Index:

A: Hostacerin CG/Trilane-4-Phosphate (and) Cetearyl Alcohol (and) PEG-6 Oleamide (and) Sodium-C14-C17 Alkyl Sec Sulfonate	15.00%
Paraffinol/Mineral oil	15.00
Belsil DM 350/Dimethicone	1.00
B: Glycerine	3.00
Wasser dest./Water	66.00
Preservatives, perfume	q.s.

Melt A at approx. 70C. heat B to 75C. Add B to A whilst stirring (do not allow a foam to form). Stir cold slowly.

Temperature stability: at 45C over 10 weeks.

Formulation 148 AH

SOURCE: Wacker Silicone: Suggested Formulations

Day Cream O/W

	%W/W
I Siegert Stearin L2SM	8.0
Lanette 16	1.5
Eumulgin B2	2.0
Eutanol G	5.0
Beeswax, white	3.0
Paraffin oil	10.0
II Henkel Glycerin 86% DAB 9	5.0
Aminomethyl propanediol	0.4
Water	65.1

**Note:**

Medium-fatting, soft-consistency, "Cold cream" type

Day creams are also designated as matt creams, vanishing creams, foundation creams or are called snow creams or pearly gloss creams due to their appearance. They are almost exclusively oil-in-water emulsions, in which mono/diglycerides such as Cutina MD and stearic acid are the main ingredients of the fatty phase.

The triethanolamine (preferably a "non-yellowing" type) normally used as the saponifying agent in the stearate creams can also be replaced by AMPD (aminomethyl propanediol), thus allowing more color-fast finished preparations to be produced.

Formula No. A11-01

Day Cream O/W

	%W/W
I Cutina KD 16	16.0
Eumulgin B1	1.0
Eutanol G	6.0
Isopropyl Myristate	4.0
II Henkel Glycerin 86% DAB 9	6.0
Water	67.0

Set pH to 7

Note: Low-fatting, soft consistency

Formula No. A11-02

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Day Cream O/W

	%W/W
I Cutina MD	6.00
Lanette O	1.50
Cutina E24	2.00
Forlanit E	0.40
Cetiol 868	8.00
II Henkel Glycerin 86% DAB 9	5.00
Triethanolamine	0.08
Water	77.02

Formula A11-32

Day Cream O/W

	%W/W
I Cutina GMS	15.0
Eumulgin B1	3.0
Dehymuls LS	3.0
Eutanol G	12.0
Myritol 318	5.0
II Henkel Glycerin 86% DAB 9	5.0
Water	57.0

Formula A11-34

Skin Cream O/W

	%W/W
I Cutina MD	14.0
Eumulgin B1	3.0
Dehymuls LS	5.0
Eutanol G	8.0
Myritol 318	8.0
Paraffin oil, high viscous	6.0
II Water	56.0

Formula A11-35

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Day Cream O/W  
(Soft Cream)

	<u>%W/W</u>
I Cutina CBS	12.0
Cutina E24	1.5
Eumulgin B2	1.5
Cetiol B	6.0
Cetiol SN	4.0
II Henkel Glycerin 86% DAB 9	5.0
Water	70.0
Formula A11-21	

Universal Day Cream O/W

	<u>%W/W</u>
I Cutina GMS	14.0
Dehymuls SMS	2.0
Eumulgin SMS 20	3.0
Eutanol G	6.0
Cetiol B	6.0
II Henkel Glycerin 86% DAB 9	3.0
Water	66.0
Formula A11-22	

Universal Day Cream O/W

	<u>%W/W</u>
I Cutina MD	14.0
Lanette 16	0.5
Eumulgin SMS 20	3.0
Eutanol G	6.0
Cetiol 868	6.0
II Henkel Glycerin 86% DAB 9	5.0
Water	65.5
Formula A11-23	

Universal Day Cream O/W

	<u>%W/W</u>
I Cutina MD	14.0
Lanette 16	0.5
Dehymuls SMS	1.0
Eumulgin SMS 20	3.0
Eutanol G	3.0
Cetiol 868	6.0
II Henkel Glycerin 86% DAB 9	5.0
Water	67.5
Formula No. A11-24	

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Day Cream O/W  
(Allround Cream)

	<u>%W/W</u>
I Cutina MD	6.0
Siebert Stearin L2SM	10.0
Eumulgin B1	3.0
Myritol 318	3.0
Paraffin oil, viscous	3.0
II. Triethanolamine	0.5
1,2-propylene glycol	5.0
Water	64.5

Note: Slight pearly gloss, medium-fatting, soft consistency  
Formula No. A11-03

Day Cream O/W

	<u>%W/W</u>
I Cutina MD	14.0
Eumulgin B1	1.5
Eumulgin B2	1.5
Cetiol B	6.0
Eutanol G	6.0
II Henkel Glycerin 86% DAB 9	6.0
Water	65.0

Formula No. A11-04

Day Cream O/W

	<u>%W/W</u>
I Lanette N or W	8.0
Eutanol G	2.5
Siebert Stearin L2SM	6.5
II Triethanolamine	0.4
Henkel Glycerin 86% DAB 9	5.0
Water	77.6

Note: This formula-as well as form. no. 11-14-is an example of  
the possible use of Lanette types for day creams.  
Formula No. A11-05

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Day Cream O/W

	%W/W
I Cutina MD	15.0
Eumulgin B1	3.0
Cetiol B	10.0
Paraffin oil, high viscous	3.0
II Henkel Glycerin 86% DAB 9	5.0
Water	64.0
Formula No. A11-06	

Day Cream O/W

	%W/W
I Emulgade F	10.0
Eutanol G	4.0
Paraffin oil, high viscous	2.0
II Henkel Glycerin 86% DAB 9	5.0
Water	79.0
Formula No. A11-07	

Day Cream O/W

	%W/W
I Cutina MD	4.0
Siegert Stearin L2SM	16.0
Eumulgin B1	3.0
Eutanol G	3.0
Paraffin oil, high viscous	3.0
II Triethanolamine	0.5
Water	70.5
Formula No. A11-08	

Note: Strong pearly gloss, low-fatting matt day cream with a soft consistency. "Vanishing cream" type.

Day Cream O/W

	%W/W
I Cutina MD	6.0
Siegert Stearin L2SM	8.0
Eumulgin B1	1.0
Eumulgin B2	1.0
Cetiol B	10.0
Eutanol G	5.0
II Henkel Glycerin 86% DAB 9	6.0
Triethanolamine	0.5
Water	62.5
Formula No. A11-09	

SOURCE: Henkel KGaA: Cosmetic Model Formulae



Day Cream O/W

	<u>%W/W</u>
I Cutina MD	15.0
Eumulgin B1	3.0
Cetiol LC	10.0
Paraffin oil, high viscous	3.0
II Henkel Glycerin 86% DAB 9	5.0
Water	64.0
Note: Low-fatting	
Formula No. A11-10	

Day Cream O/W

	<u>%W/W</u>
I Cutina KD 16	15.0
Eutanol G	5.0
Myritol 318	5.0
II Henkel Glycerin 86% DAB 9	5.0
Water	70.0

Set pH to 7

Note: Medium-fatting, soft consistency, easy to apply

Formula No. A11-11

Day Cream O/W

	<u>%W/W</u>
I Cutina LE	15.0
Eutanol G	4.0
Paraffin oil, high viscous	2.0
II 1,2-propylene glycol	5.0
Water	74.0

Note: Low-fatting, medium soft consistency

Formula No. A11-12

Day Cream O/W

	<u>%W/W</u>
I Cutina KD 16	6.0
Siebert Stearin L2SM	8.0
Eutanol G	5.0
Myritol 318	3.0
Paraffin oil, high viscous	3.0
II 1,2-propylene glycol	5.0
Triethanolamine	0.4
Water	69.6

Note: Slight pearly gloss, medium fatting, soft consistency

Formula No. A11-13

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Day Cream O/W

	<u>%W/W</u>
I Lanette N	10.0
Eutanol G	8.0
Paraffin oil, high viscous	4.0
II Henkel Glycerin 86% DAB 9	5.0
Water	73.0

Note: Medium-fatting  
Formula A11-14

Day Cream O/W

	<u>%W/W</u>
I Emulgade F	10.0
Cetiol LC	12.0
Myritol 318	6.0
II Henkel Glycerin 86% DAB 9	6.0
Water	66.0

Note: Medium-fatting  
Formula A11-15

Day Cream O/W

	<u>%W/W</u>
I Siegert Stearin L2SM	14.0
Lanette 16	2.0
Eutanol G	1.0
II Triethanolamine	1.0
Water	82.0

Note: Typical stearate cream or so-called snow cream, very dry  
formula.  
Formula A11-16

Day Cream O/W

	<u>%W/W</u>
I Cutina MD-A	4.0
Siegert Stearin L2SM	4.0
Eumulgin B1	1.0
Eumulgin B2	1.0
Cetiol SN	3.0
Myritol 318	4.0
II Henkel Glycerin 86% DAB 9	3.0
Water	80.0

Note: Soft consistency, medium-fatting.  
Formula A11-17

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Depilatory Cream

Beige-coloured cream.

Material/CTFA-Index:

A: Emulgator E-2155/Stearyl Alcohol (and) Steareth-10	8.00%
Tagat S/PEG-30-Glyceryl Stearate	2.00
Lanolin Oil	5.00
Stearyl Alcohol	2.00
Isopropyl Myristate	5.00
B: Glycerine	3.00
Water	52.00
Belsil DMC 6033/Dimethicone Copolyol Acetate	1.00
C: Calcium Oxide	3.00
Calcium Thioglycolate	5.00
Water	14.00
Preservatives, fragrances, pigments	q.s.

Heat A and B to 75C, stir B into A. Stir in C at 45C.

Temperature stability: 8 weeks at 45C

Formulation 319 AH

Hand CreamMaterial/CTFA-Index:

A: Dehymuls E/Sorbitan Sesquioleate(a.) Beeswax(a.) Aluminium Stearat(a.) Other Ingredients	6.20%
Vaseline/Petrolatum	9.00
Cetiol V/Decyl Oleate	4.50
Mineral Oil (high viscosity)	4.50
B: Water	47.80
C: Zinc Oxide	9.00
Talc	9.00
D: Belsil CM 1000/Cyclomethicone(a.) Dimethiconol	10.00
Preservatives, perfume, pigments	q.s.

Heat A and B to 60-65C. Stir B into A, add C and cool to approx. 30C. Add D.

Formulation 341 AH

SOURCE: Wacker Silicone: Suggested Formulations

Enrichment Cream

<u>Ingredient:</u>	<u>%W/W</u>
1 Emulgade SE	8.0
2 Cetiol B	9.0
3 Cetiol MM	4.0
4 Cyclomethicone 345	0.5
5 Blanose (C.M.C.)	0.5
6 Preservative	q.s.
7 Water	to 100.0

This formulation gives a medium weight O/W skin cream.

The first three components are melted together at about 85C. Component 5 is dissolved in the water which is heated to the same temperature. The oil phase is then added to the water phase, also at about 85C, and dispersed. Mixing should continue down to about 35C. The Cyclomethicone can then be added.  
Formula TS 504

Emollient Body Lotion

<u>Ingredient:</u>	<u>%W/W</u>
1 Emulgade SE	9.0
2 Cetiol LC	8.0
3 Novata AB	4.0
4 Preservative	q.s.
5 Water	to 100.0

This formulation gives a light O/W skin lotion with a medium viscosity.

The first three components are melted together at about 85C. The oil phase is then added to the water phase, also at about 85C, and dispersed. Mixing should continue down to about 35C.  
Formula TS 506

Every Day Lotion

<u>Ingredient:</u>	<u>%W/W</u>
1 Emulgade SE	8.0
2 Cetiol B	9.0
3 Cetiol MM	4.0
4 Preservative	q.s.
5 Water	to 100.0

This formulation gives a light O/W skin lotion.

The first three components are melted together at about 85C. The oil phase is then added to the water phase, also at about 85C, and dispersed. Mixing should continue down to about 35C.  
Formula TS 507

SOURCE: Henkel KGaA: Skin Care Project Formulations

**Facial Cleansing Cream**

<u>Ingredients/Trade Name:</u>	<u>Wt%</u>
Part A:	
Sodium Hydrogenated Tallow Glutamate/Amisoft HS-11	4.0
Water	23.8
Methyl Parahydroxybenzoate	0.2
Part B:	
Squalane	70.4
POE (30) Glyceryl Triisostearate/Emalex GIWS330	1.5
Butyl Parahydroxybenzoate	0.1

**Procedure:**

Heat Part A to 80-85 degrees centigrade with mixing until mix is completely uniform.

Cool Part A quickly to 30 degrees centigrade.

While Part A is being cooled, mix Part B at room temperature.

When Part A is at 30 degrees centigrade, add Part B slowly to Part A while homogenizing.

Cool the mixture to 10 degrees centigrade while mixing.

Formula MRE-04

**Facial Cleansing Milk**

<u>Ingredient/Trade Name:</u>	<u>Wt%</u>
Part A:	
TEA Cocoyl Glutamate/Amisoft CT-12	20.0
Sodium Hydrogenated Tallow Glutamate/Amisoft HS-11	1.5
Water	6.8
Methyl Parahydroxybenzoate	0.2
Part B:	
Isostearic Acid	8.5
Liquid Paraffin	59.9
Eldew CL-301	3.0
Butyl Parahydroxybenzoate	0.1

**Procedure:**

Heat Part A to 80-85 degrees centigrade while mixing. Heat Part B to 80-85 degrees centigrade while mixing. When both parts are at 80-85 degrees centigrade add Part A to Part B with stirring or homogenizing. Cool to 30 degrees centigrade.

Formula MRE-03

SOURCE: Ajinomoto USA, Inc.: Suggested Formulations

Foundation Cream

Firm cream. Absorbed well.

Material/CTFA-Index:

A: Lamecreme KSM/Glyceryl Stearate se	20.00%
Olive Oil	5.00
B: Glycerine	4.00
Water	69.50
Belsil PDM 20/Phenyl dimethicone	1.00
Belsil CM 020/Cyclomethicone	0.50
Preservatives, perfume, pigments	q.s.

Melt A, mix B and heat to 65C. Work B into A whilst stirring quickly.

Temperature stability: 8 weeks at 45C.

Formulation 191 AH

Foundation Cream

Thin cream. Absorbed well.

Material/CTFA-Index:

A: Crodax GP 200/Stearyl Alcohol (and) PEG-Stearate	13.00%
Mineral oil	30.00
Belsil PDM 20/Phenyl Dimethicone	4.00
B: Glycerine	9.00
Wasser dest./Water	44.00
Preservatives, perfume, pigments	q.s.

Mix A and melt, heat B to 65C, work B into A whilst stirring quickly. Stir whilst cooling.

Formulation 192 AH

Hand Cream

Soft, white cream with a good protective effect.

Material/CTFA-Index:

A: Stearic Acid	15.00%
Isopropyl Myristate	2.00
Belsil DM 350/Dimethicone	10.00
B; Sodium Hydroxide	1.00
Glycerine	18.00
Water	54.00
Preservatives, perfume	q.s.

Heat A to 80C, heat B to a little over 80C. Stir B slowly into A, stir cold.

Temperature stability: at 45C over 10 weeks.

Formulation 196 AH

SOURCE: Wacker Silicone: Suggested Formulations

Glycerine Cream O/W Hand Cream

	%W/W
I Cutina KD 16	17.0
Eutanol G	5.0
II Henkel Glycerin 86% DAB 9	20.0
Water	58.0
Set pH to 7	
Formula No. A16-02	

Glycerine Cream O/W Transparent, in Gel Form

	%W/W
I Eumulgin B1	2.0
II Henkel Glycerin 86% DAB 9	35.0
Carbopol 940	0.8
Triethanolamine	1.5
Water	60.7

Preparation: Whilst stirring, Carbopol 940 is swelled in cold water. Eumulgin B1 and glycerin are mixed by heating and added to the Carbopol 940 after they have cooled down to room temperature. Then, neutralize with triethanolamine NG which has been diluted with 5 parts water.  
Formula A16-03

Glycerine Cream O/W Transparent, in Gel Form

	%W/W
I Eumulgin B3	13.0
Cetiol HE	20.0
Paraffin oil, high viscous	5.0
II Henkel Glycerin 86% DAB 9	20.0
Water	42.0

Preparation: Eumulgin B3 and the fatty substances are melted on are dissolved in the fat melt. Water and glycerine are also added to the fat melt at a temperature of 95C. The gel produced is stirred and cooled and perfume is added at 60C. The gel is cooled and stirring continued, although the stirring process should be terminated after a short while to eliminate air pockets. In order to achieve the desired transparency, it is essential to observe the temperature specified.  
Glycerine creams are only intended for use on the hands!  
Formula No. A16-04

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Hand and Body Cream

Delicately balanced oil based cream with added lipid moisturization.

<u>Ingredients:</u>	<u>%W/W</u>	<u>Function</u>
1. Ritapro-165 (R.I.T.A. Blend)	2.00	Emulsifier
2. Ritaderm (R.I.T.A. Blend)	0.50	Moisture
3. Rita Stearic Acid	4.50	Emulsifier
4. Rita CA (Cetyl Alcohol)	1.00	Emulsifier
5. Mineral Oil	2.50	Emollient
6. Propylene Glycol Dipelargonate (Lexol PG 900)	3.50	Emollient
7. Propylparaben	0.05	Preservative
8. Triethanolamine @ 100%	0.80	pH
9. Propylene Glycol	3.50	Humectant
10. Methylparaben	0.15	Preservative
11. Distilled/Deionized Water	81.50	----

Compounding Procedure:

Melt ingredients 1-7 together. Heat water to 70-75C and add ingredients 8-10. Add oil phase to water phase with agitation. Cool with mixing to 40C. Add fragrance/dye if necessary.  
Ref. No. 119-103

Hand and Body Cream

Thick emollient cationic cream for extremely dry skin.

<u>Ingredients:</u>	<u>%W/W</u>	<u>Function</u>
1. Ritaderm (R.I.T.A. Blend)	2.00	Moisturizer
2. Glyceryl Stearate (and) Stearamido- ethyl Diethylamine (Lexemul AR)	10.00	Cationic Emulsifier
3. Rita IPM (Isopropyl Myristate)	7.00	Emollient
4. Mineral Oil	3.00	Feel
5. Propylparaben	0.05	Preservative
6. Glycerine	2.00	Humectant
7. Methylparaben	0.15	Preservative
8. Distilled/Deionized Water	75.80	----

Compounding Procedure:

Melt ingredients 1-5 together. In a separate beaker heat ingredients 6-8 to 70C. Add oil ingredients to water mixture slowly with good agitation. Mix well until emulsion sets. Fill into desired package.  
Ref. No. 119-105A

SOURCE: R.I.T.A. Corp.: Skin Care Formulary



Hand Cream

Soft cream, easily spread and well absorbed.

Material/CTFA-Index:

A: Polyethylenglykol 400/PEG-8	2.00%
Isopropyl Myristate	3.00
Cetyl Alcohol	1.00
Belsil CM 1000/Cyclomethicone (a.) Dimethiconol	20.00
Stearic Acid	2.00
B: Triethanolamine	0.50
Propylene Glycol	4.50
Glycerine	2.00
Water	65.00

Preservatives, perfume, pigments q.s.

Heat A and B to 80-85C, stir B into A with good agitation.

Temperature stability: at 45C more than 8 weeks.

Formulation 638 AH

Skin CreamMaterial/CTFA-Index:

A: Hostacerin W0/Polyglyceryl-2 Sesquiosostearate (and)	
Beeswax (and) Mineral Oil (and) Magnesium Stearate	
(and) Aluminum Stearate	10.00%
Belsil CM 1000/Cyclomethicone (and) Dimethiconol	10.00
Isopropyl Palmitate	10.00
B: Water	70.00
Preservatives, perfume, pigments	q.s.

W/O cream

Heat A and B to 75-80C. Stir B into A.

Temperature stability: at 45C 6 weeks.

Formulation 694 AH

Skin-care CreamMaterial/CTFA-Index:

A: Hostacerin CG/Trilaneeth-4 Phosphate (and) Cetearyl	
Alcohol (and) PEG-6 Oleamide (and) Sodium C14-17	
Alkyl sec Sulfonate	5.00%
Belsil CM 1000/Cyclomethicone (a.)Dimethiconol	6.00
Isopropyl Palmitate	4.00
B: Hostacerin PN 73/Acrylamide/Sodium Acrylate Copolymer	0.20
Water	84.80
Preservatives, perfume, pigments	q.s.

Mix the ingredients of B, heat A and B to 75-80C. Stir B into A.

Temperature stability: at 45C more than 10 weeks.

Formulation 705 AH

SOURCE: Wacker Silicone: Suggested Formulation

"Light and White" Day Cream

The combination of Dow Corning silicones provides the skin with benefits such as: non-oily, emolliency (DC 556), highly spreadable product (DC 334), substantivity and silky feel (DC 1403); w/o cold processed emulsion, glossy smooth and stable (DC 5200).

<u>Ingredients:</u>	<u>% by Weight</u>
A. Dow Corning 5200	2.00
Dow Corning 344	5.00
Dow Corning 556	1.00
Amerchol L-101	2.00
Camelia Oil	8.00
Copherol 1250	1.00
Coviox T-70P	0.10
B. Propylene Glycol	3.00
EDTA Disodium	0.20
Sodium Chloride	2.00
Coviox T-30	0.10
Pronalen Fruit Acids AHA-20	3.00
AMP-95	0.30
Suttocide A	0.80
Water (Distilled)	63.30
Chinese White Tuckahoe	3.00
C. Dow Corning 1403	5.00
Perf. Jingle	0.20

Note: Check pH of water phase (should be around 5.0) and correct with AMP-95, if necessary.

Procedure:

1. Mix ingredients of phase A and B in separate containers (make sure to correct pH of water phase before proceeding further).
2. With high speed stirring, add small amount of water phase (1%-2%) to oil phase and mix until primary emulsion is formed.
3. Transfer emulsion to propeller stirrer and start adding water phase slowly and constantly while mixing with average speed.
4. When whole of water phase is used add ingredients of Phase C one after another with slow mixing.
5. Continue mixing until desired viscosity is achieved, stop mixing, take sample to QC and when approved pack the product.

SOURCE: Angus Chemical Co.: Angus Product Formulary: Formulation PF-0310 suggested by Dow Corning

Light Body Cream

<u>Ingredient:</u>	<u>%W/W</u>
1 Cutina FS45	3.0
2 Cegesoft C24	7.0
3 Lorol C16	1.0
4 Lorol C18	1.0
5 Cutina MD	1.0
6 Dow Corning Fluid 345	0.25
7 Carbopol 980	0.1
8 KOH (20%)	1.2
9 Preservative	q.s.
10 Water	to 100.0

This formulation gives a light weight O/W skin cream with a slightly translucent appearance.

The first five components are melted together at about 85C. Component 7 is dissolved in half of the water, with the Component 8 being dissolved in the other half. Both portions of water are then heated to 85C and mixed. The oil phase is then added to the water phase and dispersed. Mixing should continue down to about 35C.  
Formula TS 498

Moisturising Enrichment Cream

<u>Ingredient:</u>	<u>%W/W</u>
1 Cutina FS45	4.0
2 Cegesoft C24	10.0
3 Lorol C16	1.5
4 Lorol C18	1.5
5 Cutina MD	3.0
6 Hygroplex HHG	4.0
7 KOH (20%)	1.5
8 Preservative	q.s.
9 Water	to 100.0

This formulation gives a heavy weight O/W skin cream.

The first five components are melted together at about 85C. Component 6 is dissolved in half of the water, with the Component 7 being dissolved in the other half. Both portions of water are then heated to 85C and mixed. The oil phase is then added to the water phase and dispersed. Mixing should continue down to about 35C.  
Formula TS 499

SOURCE: Henkel KGaA: Skin Care Project Formulations

Light Emollient Cream

<u>Ingredient:</u>		<u>%W/W</u>
1	Stenol 16-65	2.2
2	Monomuls 60-35	5.0
3	Eumulgin B2	3.0
4	Cetiol SB45	5.1
5	Myritol 318	10.0
6	Preservative	q.s.
7	Water	to 100.0

This formulation gives a lightweight O/W Cream with good emollience.

The first five components are heated together to 85C. The water is also heated to this temperature. The oil phase can then be added to the water phase and dispersed. Mixing should continue down to about 35C.

Formula TS 374

Almond Oil Cream

<u>Ingredient:</u>		<u>%W/W</u>
1	Eumulgin B2	3.0
2	Monomuls 60-35	3.1
3	Novata AB	4.8
4	Almond Oil	10.2
5	Lorol C16	2.05
6	Lorol C18	2.05
7	Preservative	q.s.
8	Water	to 100.0

This formulation gives a stiff O/W Cream, with good spreading and a rich feel.

The first six components are heated together to 85C. The water is also heated to 85C. The oil phase can then be added to the water phase and dispersed. Mixing should continue down to about 35C.

Formula TS 415

Almond Oil Cream with Protein

<u>Ingredient:</u>		<u>%W/W</u>
1	Eumulgin B2	3.0
2	Monomuls 60-35	3.1
3	Cetiol SB45	4.5
4	Almond Oil	10.2
5	Sipol 16-18 C50	4.1
6	Gluadin AGP	1.0
7	Preservative	q.s.
8	Water	to 100.0

This formulation gives a stiff O/W Cream, with good spreading and a rich feel.

The first five components are heated together to 85C. Component six is dissolved in the water and this mixture is also heated to 85C. The oil phase can then be added to the water phase and dispersed. Mixing should continue down to about 35C.

Formula TS 416

SOURCE: Henkel KGaA: Skin Care Project Formulations

Light Enrichment Cream

<u>Ingredient:</u>	<u>%W/W</u>
1 Monomuls 90-0 18	2.0
2 Lameform TGI	4.0
3 Cetiol A	21.0
4 Sipol 1618 C50	1.0
5 Beeswax	3.0
6 Zinc stearate	2.0
7 Magnesium sulphate	1.0
8 Glycerine	3.0
9 Preservative	q.s.
10 Water	to 100.0

This formulation gives a light W/O cream with good emollience.

The first six components are melted together at about 85C. Components 7 & 8 are dissolved in the water and this mixture is then heated to the same temperature as the oil phase. The water phase is then added to the oil phase and dispersed. Mixing should continue down to about 35C. The product should then be homogenised fully using a Triple Roll Mill.  
Formula TS 464

Daily Nourishing Cream

<u>Ingredient:</u>	<u>%W/W</u>
1 Emulgade SE	8.0
2 Cetiol A	11.0
3 Cetiol SB45	4.0
4 Sipol 1618 C50	0.5
5 Novata AB	2.0
6 White Soft Paraffin	1.0
7 Liquid Paraffin (Light)	8.0
8 Silicone Oil M100	0.5
9 Glycerine	3.0
10 Preservative	q.s.
11 Water	to 100.0

This formulation gives a rich O/W cream with good emollience and a very smooth skin feel.

The first eight components are melted together at about 85C. Component 9 is dissolved in the water and this mixture is then heated to the same temperature as the oil phase. The water phase is then added to the oil phase and dispersed. Mixing should continue down to about 35C.  
Formula TS 465

SOURCE: Henkel KGaA: Skin Care Project Formulations

Make-up Cream O/W

	<u>%W/W</u>
I Emulgade F	1.00
Lanette 16	2.00
Cetiol V	10.00
Paraffin oil, high viscous	25.00
Wool fat, anhydrous	2.00
Pigment colors	10.00
II 1,2-propylene glycol	5.00
Luviskol K30	1.00
Veegum	1.75
Citric acid	0.50
Water	41.75

Formula No. P11-01

Make-Up Cream O/W

	<u>%W/W</u>
I Lanette 16	2.0
Siebert Stearin L2 SM	4.0
Eumulgin O5	2.0
Isopropyl myristate	12.0
Paraffin oil, high viscous	6.0
Pigment colors	8.0
II Triethanolamine NG	0.4
Veegum solution 4%	30.0
Water	33.6

Preparation: The pigments are mixed with part of the finished emulsion, homogenized and stirred into the rest of the emulsion.  
Formula No. P11-02

Make-Up Cream O/W

	<u>%W/W</u>
I Cutina KD 16	8.0
Eumulgin B1	1.0
Eutanol G	4.0
Isopropyl myristate	4.0
Paraffin oil, high viscous	2.0
Pigment colors	8.0
II Veegum solution 4%	35.0
Water	38.0

Set pH to 7

Formula No. P11-03

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Massage Cream O/W

	<u>%W/W</u>
I Lanette 16	2.0
Cutina MD	12.0
Eumulgin B1	2.0
Eumulgin B2	2.0
Myritol 318	10.0
Paraffin oil, high viscous	25.0

II Water	47.0
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Formula No. H11-01

Massage Cream W/O

	<u>%W/W</u>
I Dehymuls K	25.0
Myritol 318	15.0
Paraffin oil, high viscous	15.0

II Water	45.0
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Formula No. H11-02

Massage Cream. Anhydrous, Removable by Washing

	<u>%W/W</u>
Amphocerin K	43.0
Eumulgin B2	2.0
Cetiol LC	15.0
Paraffin oil, high viscous	15.0
Vaseline, white	25.0

Note: This cream is an example of an anhydrous massage preparation. Such fatty creams are normally more difficult to wash off the skin; this formulation is, however, removable due to the addition of Eumulgin B2.

Formula No. H11-03

Massage Oil

	<u>%W/W</u>
Cetiol LC	18.0
Myritol 318	37.0
Paraffin oil, high viscous	45.0

Formula No. H31-01

SOURCE: Henkel KGaA: Cosmetic Model Formulae

**Moisture Cream****Ingredients:**

	<b>%</b>
Phase A:	
H <sub>2</sub> O, Deionized	78.50
Carbopol 934	0.20
Propylene Glycol	2.00
Methyl Paraben	0.25

**Phase B:**

Hest CSO (Cetearyl Octanoate)	5.00
Glyceryl Stearate	2.00
Hetoxamate 100S (PEG-100 Stearate)	2.00
Hetan SS (Sorbitan Stearate)	2.50
Lanolin	0.50
Hetoxide HC-40 (PEG-40 Hydrogenated Castor Oil)	0.50
Jobba Oil	1.75
Mineral Oil	2.00
Hetoxol G (Stearyl Alcohol & Cetareth 20)	0.60
Dimethicone 350	0.50
Propyl Paraben	0.15

**Phase C:**

TEA 99%	0.25
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**Phase D:**

H <sub>2</sub> O, Deionized	1.00
Germall 115	0.30

**Procedure:**

- 1) In a stainless steel kettle equipped with a Lightnin' type mixer, add water.
- 2) With mixer on high, slowly sprinkle Carbopol 934 into vortex. Mix until uniform.
- 3) Heat to 75C, add remainder of Phase A.
- 4) In a separate kettle, add Phase B, heat to 75C while mixing until uniform.
- 5) Add Phase B to Phase A. Mix while avoiding aeration.
- 6) Add Phase C, mix well.
- 7) Cool to 45C and switch to planetary mixer.
- 8) Add premix Phase D. Mix to 25-30C.

**Specifications:**

pH: 6.50

Viscosity, #4/3 RPM: 120,000 cps

**SOURCE:** Heterene, Inc.: Formula HC91-39



**Moisture Cream**

<u>Ingredients:</u>	<u>%</u>
Phase A:	
H <sub>2</sub> O, Deionized	70.25
Carbopol 934	0.25
Hest L-2-O (Laureth-2-Octanoate)	8.50
Methyl Paraben	0.25
Phase B:	
Cetyl Alcohol	3.50
Hetoxol P (Emulsifying Wax)	6.50
Propyl Paraben	0.15
Phase C:	
TEA 99%	0.30
H <sub>2</sub> O, Deionized	5.00
Phase D:	
Imidazolidinyl Urea	0.30
H <sub>2</sub> O, Deionized	5.00

**Specifications:**

pH: 6.10

Viscosity #4/12: 42,500 cps

**Procedure:**

- 1) In a stainless steel kettle, add H<sub>2</sub>O. Premix Hest L-2-O with Carbopol 934 and add to H<sub>2</sub>O while mixing until dispersed. Add methyl paraben and heat to 75C.
- 2) In a separate kettle, combine Phase B and heat to 75C while mixing.
- 3) Add Phase B to Phase A while mixing until uniform.
- 4) Add Premix Phase C to batch.
- 5) Cool to 40C and add premix Phase D. Mix well.

Formula HC 93-96-4

**Moisture Cream**

<u>Ingredients:</u>	<u>%</u>
Phase A:	
H <sub>2</sub> O, Deionized	81.00
Hetoxide G-26 (Glycereth-26)	4.00
Phase B:	
Hest MS (Myristyl Stearate)	4.50
Hest G-7-TO (Glycereth-7 Trioctanoate)	4.00
Hetoxol D (Cetearyl Alcohol & Ceteareth-20)	5.50
Phase C:	
Germaben II	1.00

**Procedure:**

- 1) In separate stainless steel kettles, add Phase A and Phase B.
- 2) Heat to 75C while mixing.
- 3) Add Phase B to Phase A. Mix until homogeneous.
- 4) Cool to 40C and add Phase C. Mix until uniform.

Formula HC 93-118-1

**SOURCE: Heterene, Inc.: Suggested Formulas**

**Moisture Cream for Dry Skin**

<b><u>Ingredients:</u></b>	<b><u>%</u></b>
Phase A:	
H2O, Deionized	73.30
Keltrol T	0.20
Propylene Glycol	5.00
Phase B:	
Hest CSO (Cetearyl Octanoate)	12.00
Hetoxamate SA-40 (PEG-40 Stearate)	3.00
Hetol CS (Cetearyl Alcohol)	2.75
PEG 150 Distearate	0.25
Glyceryl Stearate	2.50
Phase C:	
Germaben II	1.00
<b><u>Specifications:</u></b>	
pH: 6.40	

**Procedure:**

- 1) In a stainless steel kettle equipped with a Lightnin' type mixer, add H2O.
  - 2) With mixer on high, sprinkle Keltrol T into vortex until completely dispersed.
  - 3) Add propylene glycol, heat to 75C.
  - 4) In a separate kettle add Phase B, heat to 75C.
  - 5) At 75C add Phase B to Phase A. Mix until homogeneous.
  - 6) Cool to 45C, add Phase C, mix well.
- Phase HC92-38-1

**Oil Free Night Cream**

<b><u>Ingredients:</u></b>	<b><u>%</u></b>
Phase A:	
H2O, Deionized	69.35
Sorbitol	2.50
Methyl Paraben	0.25
TEA 99%	1.00
Phase B:	
Glyceryl Stearate	3.70
Hest MS (Myristyl Stearate)	3.00
Stearic Acid	4.00
Hetol CA (Cetyl Alcohol)	1.75
Panalone	1.00
Hest CSO (Cetearyl Octanoate)	10.00
Propyl Paraben	0.15
Phase C:	
H2O, Deionized	3.00
Germall 115	0.30
<b><u>Specifications:</u></b>	
pH: 7.25	

**Procedure:**

- 1) In a stainless steel kettle equipped with a Lightnin' type mixer, combine ingredients in Phase A and heat to 75C.
  - 2) In a separate kettle combine Phase B and heat to 75C.
  - 3) At 75C add Phase B to Phase A.
  - 4) Cool to 45C add premix Phase C. Mix well.
- Formula HC-92-65-3

SOURCE: Heterene, Inc.: Suggested Formulas

**Moisturizing Cream**

White firm cream. Produces a pleasant soft feeling on the skin

**Material/CTFA-Index:**

A: Emulgator E2155/Stearyl Alcohol (and) Steareth- (and) Steareth-10	8.00%
Cetiol SN/Cetearyl Alcohol Isononanoate	6.00
Isopropyl Myristate	6.00
Tegosoft 189/Isooctadecyl Isononanoate	6.00
Stearyl Alcohol	2.00
Belsil SDM 6022/Dimethicone (and) Stearoxy Dimethylsilane (and) Stearoxy Dimethyldisiloxane	5.00
B: Water	62.00
Belsil DMC 6032/Dimethicone Copolyol Acetate	2.00
Glycerine	3.00
Preservatives, fragrances, pigments	q.s.

Heat A and B each to 75C. Stir B into A, stir cold.  
Temperature stability: at 45C over 10 weeks.  
Formulation 418 AH

**Emollient Cream**

White firm cream. A slightly cooling effect.

**Material/CTFA-Index:**

A: Arlacel 165/Glyceryl Stearate se	6.00%
Arlamol E/PPG-15 Stearylether	3.00
Cetyl Alcohol	5.00
Vaseline/Petrolatum	3.00
Belsil PDM 20/Phenyl Dimethicone	2.00
B: Sorbitol 70%ig/Sorbitol	10.00
Water	71.00
Preservatives, fragrances, pigments	q.s.

Heat A to 70C, heat B to 72C. Stir B into A, stir cold.  
Temperature stability: at 45C over 10 weeks.  
Formulation 405 AH

**Day Cream**

Soft white cream. Absorbed well, slightly cooling effect.

A: Lanette N/Cetearyl Alcohol (and) Sodium Cetearyl Sulfate	15.00%
Eutanol G/Octyldedecanol	5.00
Belsil DM 350/Dimethicone	10.00
Belsil PDM 20/Phenyl Dimethicone	2.00
B: Glycerine	5.00
Water	63.00
Preservatives, fragrances, pigments	q.s.

Heat A and B each to 70C. Stir B into A. Stir cold.  
Temperature stability: at 45C over 10 weeks.  
Formulation 404 AH

**SOURCE: Wacker Silicone: Suggested Formulations**

Moisturizing Cream

<u>Ingredient:</u>	<u>%W/W</u>
1 Eumulgin B2	1.5
2 Eumulgin B1	1.5
3 Cutina MD	3.5
4 Cetiol MM	5.0
5 Lorol C16	1.75
6 Lorol C18	1.75
7 Myritol 318	8.0
8 Paraffin oil	11.0
9 White Soft Paraffin	14.0
10 Silicone Oil M100	0.5
11 Preservative	q.s.
12 Water	to 100.0

This formulation gives a high viscosity, rich moisturising O/W skin cream.

The first ten components are melted together at about 85C. The water is then heated to the same temperature. The oil phase is then added to the water phase and dispersed. Mixing should continue down to about 30C. To achieve the optimum viscosity, mixing must be continued until the product has fully cooled down.

Formula TS 496

O.T.C. Type Moisturizing Cream

<u>Ingredient:</u>	<u>%W/W</u>
1 Eumulgin B2	1.5
2 Eumulgin B1	1.5
3 Cutina MD	3.5
4 Novata AB	5.0
5 Sipol 1618 C50	3.5
6 Myritol 318	8.0
7 Paraffin oil	11.0
8 White Soft Paraffin	14.0
9 Silicone Oil M100	1.0
10 Preservative	q.s.
11 Water	to 100.0

This formulation gives a high viscosity, rich moisturising O/W skin cream.

The first ten components are melted together at about 85C. The water is then heated to the same temperature. The oil phase is then added to the water phase and dispersed. Mixing should continue down to about 30C. To achieve the optimum viscosity, mixing must be continued until the product has fully cooled down.

Formula TS 497

SOURCE: Henkel KGaA: Skin Care Project Formulations

**Moisturizing Protective Day Care Cream**

<u>Ingredient:</u>	<u>%W/W</u>
1 Cutina MD	7.0
2 Stenol 16-65	2.0
3 Eumulgin B2	3.0
4 Eutanol G	3.0
5 Cetiol SN	7.0
6 Cetiol SB45	5.0
7 Hygroplex HHG CLR	4.0
8 Preservative	q.s.
9 Water	to 100.0

This formulation gives an O/W cream which gives active moisturising.

The first six components are heated together to 85C. Component seven is dissolved in the water and this mixture is also heated to 85C. The oil phase is then mixed into the water phase and dispersed. Mixing should continue down to about 35C.

Formula TS 265

**Light Everyday Cream**

<u>Ingredient:</u>	<u>%W/W</u>
1 Cutina MD	5.9
2 Stenol 16-65	2.1
3 Eumulgin B2	3.0
4 Cetiol SB45	4.8
5 Cetiol SN	10.0
6 Preservative	q.s.
7 Water	to 100.0

This formulation gives an O/W Cream with good emollience.

The first five components are heated together to 85C. The water is also heated to this temperature. The oil phase can then be added to the water phase and dispersed. Mixing should continue down to about 35C.

Formula TS 369

**Everyday Moisturizing Cream**

<u>Ingredient:</u>	<u>%W/W</u>
1 Cutina MD	4.1
2 Stenol 16-65	1.1
3 Eumulgin B2	3.0
4 Cetiol SB45	5.0
5 Cetiol SN	9.0
6 Hygroplex HHG	2.0
7 Preservative	q.s.
8 Water	to 100.0

This formulation gives an O/W Cream with effective moisturising.

The first five components are heated together to 85C. Component six is incorporated into the water, and this mixture is also heated to 85C. The oil phase can then be added to the water phase and dispersed. Mixing should continue down to about 35C.

Formula TS 370

SOURCE: Henkel KGaA: Skin Care Project Formulations

Moisturizing Body Cream

A moisturizing body cream formula to help alleviate skin dryness, roughness and chapping.

<u>Ingredients:</u>	<u>%W/W</u>	<u>Function</u>
1. Ritachol 1000 (R.I.T.A. Blend)	3.00	Emulsifier
2. Rita CA (Cetyl Alcohol)	3.00	Emulsifier
3. Rita GMS (Glyceryl Stearate)	1.50	Viscosity
4. Rita Stearic Acid	2.25	Emulsifier
5. Ritachol (Mineral Oil and Lanolin Alcohol)	2.00	Emollient
6. Ritaderm (R.I.T.A. Blend)	10.00	Moisture Base
7. Mineral Oil	4.00	Slip
8. BHT	0.10	Anti-oxidant
9. Propylparaben	0.10	Preservative
10. Acritamer 940 (Carbomer 940)	0.10	Stability
11. Distilled/Deionized water	68.25	----
12. Glycerine	5.00	Humectant
13. Methylparaben	0.10	Preservative
14. Triethanolamine @ 50%	0.20	Neutralizer
15. Glydant	0.20	Preservative
16. Perfume	0.20	Odor

Compounding Procedure:

Weigh items 1-9 into beaker and heat to 70C with stirring. To the water add item #10 and stir until lump free. Add items 12 and 13 and heat until 70C. Add oil phase to water phase with agitation. Add item 14 and stir well. Cool to 40C and add remaining items.

Ref. No. 119-84

Every Day Hand Cream

An everyday medium strength hand cream with emollient system designed to vanish quickly on the skin.

<u>Ingredients:</u>	<u>%W/W</u>	<u>Function</u>
1. Rita GMS (Glyceryl Stearate)	2.00	Emulsion Stabilizer
2. Rita CA (Cetyl Alcohol)	3.00	Emulsifier
3. Mineral Oil	2.00	Moisture
4. Rita Stearic Acid	1.50	Emulsifier
5. Propylene Glycol Dioctanoate (Lexol PG 800)	2.00	Feel
6. Propylparaben	0.05	Preservative
7. Glycerine	1.50	Humectant
8. Triethanolamine @ 100%	0.30	Neutralizer
9. Methylparaben	0.15	Preservative
10. Distilled/Deionized Water	87.50	----

Compounding Procedure:

Melt ingredients 1-6. Heat water to 70-75C. Add items 7-9 to the water. Add oil phase to water phase with agitation. Cool with mixing until 40C.

Ref. No. 119-104

SOURCE: R.I.T.A. Corp.: Skin Care Formulary

Moisturizing Cream O/W

	<u>%W/W</u>
I Cutina MD	16.0
Eumulgin B1	1.5
Eumulgin B2	1.5
Cetiol V	5.0
Myritol 318	5.0
Paraffin oil, high viscous	2.0
II Hygroplex HHG	5.0
1,2-propylene glycol	5.0
Water	59.0

Formula A14-01

Moisturizing Cream O/W

	<u>%W/W</u>
I Cutina KD 16	16.0
Eumulgin B1	1.0
Eutanol G	12.0
Isopropyl Myristate	8.0
Paraffin oil, high viscous	4.0
II Hygroplex HHG	5.0
Karion F, liquid	8.0
Water	46.0

Note: Soft consistency, easy to apply

Formula No. A 14-02

Moisturizing Cream O/W

	<u>%W/W</u>
I Dehymuls K	20.0
Cetiol V	10.0
Beeswax	3.0
Vegetable oil	10.0
II Hygroplex HHG	5.0
Magnesium sulfate-7-hydrate	0.2
Water	51.8

Formula No. A14-03

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Moisturizing Cream

This formulation demonstrates a polymeric approach to occlusive moisturization eliminating undesirable feel properties of petrolatum or other traditional occlusive ingredients.

Epolene N-34 Wax is a non-emulsifiable polyethylene which provides a film that is resistant to wash-off. It is incorporated into this emulsion with Eastman AQ 55 water-dispersible polyester which also contributes a protective film. The wash-off resistance is due to the inability of Epolene N-34 to be emulsified by soap or surfactants. The dual film-forming action of this polymer combination has been shown to reduce moisture loss. In vitro occlusivity data is desirable.

Phase A:	%W/W
Distilled water	q.s. to 100
Propylene glycol, USP	4.00

Phase B:	
Polawax emulsifying wax, NF	3.00
Arlacel 165 glyceryl stearate and PEG-100 stearate	3.00
Myverol 18-06 distilled monoglyceride	3.00
Isopropyl myristate	5.00
Robane squalane, NF	5.00
Epolene N-34 polyethylene wax	1.00

Phase C:	
Distilled water	10.00
Propylene glycol	3.00
Eastman AQ 55S polymer	1.00

Phase D:	
Eastman vitamin E TPGS (20%)	1.00

Phase E:	
Fragrance	q.s.
Preservative	q.s.

Procedure:

1. Prepare Phase C by adding propylene glycol to water and heating to 95C and then adding Eastman AQ 55S with mixing. Allow to cool to 70C.
2. Heat Phase A with mixing to 95C.
3. Heat Phase B with mixing to 105-110C.
4. Cool Phase B to 95C and add to Phase A with propeller mixing.
5. Continue mixing and cool to 70C, avoiding air entrapment.
6. At 70C, add Phase C.
7. Continue mixing and cool to 50C; then add Phase D and Phase E.
8. With mixing, force cool to room temperature. Product will thicken and form a cream at 44C.

pH: 5.5

SOURCE: Eastman Chemical Co.: Formulation X20491-069



**Moisturizing Skin Cream**

This traditional formulation is a rich, stiff cream which is suitable for the treatment of dry skin.

<u>Ingredient:</u>	<u>Weight%</u>	<u>Function</u>
<b>Part A:</b>		
Deionized Water	60.90	Diluent
Carbopol 934 (1)	0.20	Emulsion Stabilizer
Propylene Glycol	4.00	Humectant
Methylparaben	0.15	Preservative
Propylparaben	0.05	Preservative
<b>Part B:</b>		
Mineral Oil	18.00	Moisture Barrier
Isopropyl Palmitate	5.00	Emollient
Glycol Stearate	5.00	Secondary Emulsifier
Stearic Acid	2.00	Primary Emulsifier
Cetyl Alcohol	2.00	Structuring Agent
Polysorbate 20	0.80	Primary Emulsifier
<b>Part C:</b>		
Triethanolamine (99%)	1.80	Neutralizing Agent
<b>Part D:</b>		
Quaternium-15 (2)	0.10	Preservative

(1) Carbomer (BFGoodrich)

(2) Dowicil 200 (Dow Chemical)

**Preparation:**

1. Charge water to a vessel which will contain the entire formulation. Slowly sift Carbopol into the vortex of rapidly agitated water. When resin has been dispersed, reduce mixing rate. Heat to 60C.
2. Dissolve parabens in the propylene glycol. Add this solution to the Carbopol dispersion.
3. In a separate vessel, combine all Part B ingredients and heat to 60C.
4. When Parts A and B are homogeneous, add B to A with vigorous agitation.
5. Add Part C. Continue mixing and remove heat.
6. Add Part D @ 40-45C. When temperature reaches 35-40C, stop agitation and fill containers.

SOURCE: BF Goodrich Co.; Formula C0020

Nail Care Cream W/O

	<u>%W/W</u>
I Dehymuls E	10.0
Cetiol V	12.0
Cutina BW	3.0
Vaseline, white	15.0
Avocado oil CLR	5.0
Carrot oil CLR	2.0
Oil of St. John's wort CLR	3.0
II Water	50.0

Formulae No. A15-10

Cucumber Juice Cream O/W

	<u>%W/W</u>
I Cutina MD	16.0
Eumulgin B1	3.0
Eutanol G	15.0
Myritol 318	10.0
II 1,2-propylene glycol	5.0
Water	48.0
III Extrapon cucumber spec.	3.0

Preparation: Phase III is added to the emulsion at 40C.

Formula No. A15-11

Alcohol Cream O/W

	<u>%W/W</u>
I Cutina MD	4.0
Eumulgin B1	1.0
Cetiol V	5.0
Carbopol 934	1.0
Ethyl alcohol 96%	45.0
II Triethanolamine	1.5
Water	42.5

Preparation: Whilst stirring, Carbopol 934 is allowed to swell in 40 parts ethyl alcohol and about half of the water. The gel produced is neutralized with triethanolamine which has been mixed earlier with the remaining 5 parts of ethyl alcohol. The solids and the rest of the water are processed to form a cream and stirred together with the gel before being perfumed and homogenized.

Formula No. A15-12

SOURCE: Henkel KGaA: Cosmetic Model Formulae

**Night Cream**

<b><u>Ingredients:</u></b>	<b>%</b>
Phase A:	
H <sub>2</sub> O, Deionized	59.85
Carbopol 934	0.35
Propylene Glycol	2.50
Methyl Paraben	0.30
Hetoxide G-26 (Glycereth 26)	2.00

Phase B:	
Lanolin	1.00
Mineral Oil #7	9.00
Hetoxamate SA-100 (PEG-100 Stearate)	1.25
Glyceryl Stearate	1.25
Silicone SF-1173	2.50
Panalene	1.25
Hest CSO (Cetearyl Octanoate)	4.40
Hetoxamate SA-40 (PEG-40 Stearate)	1.90
Cetyl Alcohol	1.80
Hetoxol L-4 (Laureth-4)	1.80
Hest MS (Myristyl Stearate)	3.00
Propyl Paraben	0.15

Phase C:	
TEA 99%	0.55
H <sub>2</sub> O, Deionized	1.00

Phase D:	
Vitamin E Acetate	0.60
Aloe Vera Extract	1.00
Elastin CLR	1.00
Almond Extract	0.25

Phase E:	
Germall 115	0.30
H <sub>2</sub> O, Deionized	1.00

**Specifications:**

pH: 7.00

**Procedure:**

- 1) In a stainless steel kettle equipped with a Lightnin' type mixer, add H<sub>2</sub>O.
- 2) With mixer on high, slowly sprinkle Carbopol 934 into vortex. Mix until uniform.
- 3) Begin heating to 75C, add Phase A.
- 4) In a separate kettle, combine oil Phase B and heat to 75C while mixing, until completely melted.
- 5) Slowly add Phase B to Phase A while mixing until homogeneous.
- 6) Add Premix Phase C. Mix well. Avoiding aeration, begin cooling.
- 7) At 45C add remainder of ingredients, mix well.

SOURCE: Heterene, Inc.: Formula HC 92-59-3

Night Cream O/W

	<u>%W/W</u>
I Cutina MD	4.0
Siebert Stearin L2SM	8.0
Eumulgin B1	1.5
Eumulgin B2	1.5
Eutanol G	15.0
Cutina BW	2.0
Paraffin oil, high viscous	20.0
II Triethanolamine	0.2
Water	47.8

Note: High-fatting night cream with a medium soft consistency.  
 "Cold cream" type.  
 Formula No. A12-01

Night Cream O/W

	<u>%W/W</u>
I Lanette 16	1.0
Cutina MD	14.0
Eumulgin B1	1.5
Eumulgin B2	1.5
Myritol 318	10.0
Cetiol LC	10.0
II Water	62.0

Note: Fatting  
 Formula No. A12-02

Night Cream O/W

	<u>%W/W</u>
I Cutina KD 16	15.0
Eutanol G	12.0
Myritol 318	6.0
Paraffin oil, high viscous	6.0
II 1,2-propylene glycol	5.0
Water	56.0

Note: Fatting  
 Formula No. A12-03

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Night Cream O/W

	<u>%W/W</u>
I Cutina MD	10.0
Lanette O	2.0
Eumulgin B1	1.5
Eumulgin B2	1.5
Novata AB	5.0
Eutanol G	10.0
Paraffin oil	5.0
II Henkel Glycerin 86% DAB 9	5.0
Water	60.0

Note: Soft consistency, fatting  
Formula No. A12-07

Care Cream W/O

	<u>%W/W</u>
I Dehymuls K	20.0
Vegetable oil	10.0
II Henkel Glycerin 86% DAB 9	5.0
Water	65.0

Note: Medium-fatting  
Formula No. A12-08

Cold Cream W/O

	<u>%W/W</u>
I Amphocerin E	10.0
Vegetable oil	20.0
Vaseline, white	20.0
II Water	50.0

Note: Fatting, medium soft consistency  
Formula No. A12-09

Care Cream W/O

	<u>%W/W</u>
I Dehymuls E	8.0
Vegetable oil	20.0
Cetiol V	5.0
Cutina BW	2.0
Vaseline, white	10.0
II Henkel Glycerin 86% DAB 9	3.0
Water	52.0

Note: High-fatting  
Formula No. A12-10  
SOURCE: Henkel KGaA: Cosmetic Model Formulae

Night and Care Cream W/O

	<u>%W/W</u>
I Dehymuls E	7.0
Cetiol V	4.0
Vegetable oil	20.0
Vaseline, white	19.0
II Henkel Glycerin 86% DAB 9	5.0
Water	45.0

Note: High-fatting, soft consistency  
Formula No. A12-12

Care Cream W/O

	<u>%W/W</u>
I Dehymuls F	10.0
Novata AB	6.0
Cetiol V	8.0
Eutanol G	6.0
Vegetable oil	5.0
Paraffin oil, low viscous	4.0
II Henkel Glycerin 86% DAB 9	5.0
Magnesium sulfate-7-hydrate	0.3
Water	55.7

Note: This skin cream is an example of the possible uses of the Novata solid triglycerides. The addition of Novata AB enhances the overall structure of the cream; it allows the hydrocarbon shares either to be reduced or to be replaced completely. The addition of a maximum of 6% triglyceride improves the melting properties of creams on the skin.  
Formula No. A12-14

Skin Cream W/O

	<u>%W/W</u>
I Dehymuls F	8.0
Cetiol V	8.0
Vegetable oil	5.0
Vaseline, white	10.0
II Henkel Glycerin 86% DAB 9	3.0
Magnesium sulfate-7-hydrate	0.3
Water	65.7

Note: Medium-fatting  
Formula A12-15

SOURCE: Henkel KGaA: Cosmetic Model Formulae

**O.T.C. Type Moisturizing Cream**

<u>Ingredient:</u>	<u>%W/W</u>
1 Eumulgin B2	1.5
2 Eumulgin B1	1.5
3 Cutina MD	4.0
4 Novata AB	5.0
5 Sipol 16 18 C50	3.0
6 Myritol 318	8.0
7 Paraffin oil	11.0
8 White Soft Paraffin	14.0
9 Preservative	q.s.
10 Water	to 100.0

This formulation gives a high viscosity, rich moisturising O/W skin cream.

The first eight components are melted together at about 85C. The water is then heated to the same temperature. The oil phase is then added to the water phase and dispersed. Mixing should continue down to about 30C. To achieve the optimum viscosity, mixing must be continued until the product has fully cooled down.

Formula TS 494

**O.T.C. Type Moisturizing Cream**

<u>Ingredient:</u>	<u>%W/W</u>
1 Eumulgin B2	1.5
2 Eumulgin B1	1.5
3 Cutina MD	3.5
4 Novata AB	5.0
5 Sipol 16 18 C50	3.5
6 Myritol 318	8.0
7 Paraffin oil	11.0
8 White Soft Paraffin	14.0
9 Preservative	q.s.
10 Water	to 100.0

This formulation gives a high viscosity, rich moisturising O/W skin cream.

The first eight components are melted together at about 85C. The water is then heated to the same temperature. The oil phase is then added to the water phase and dispersed. Mixing should continue down to about 30C.

To achieve the optimum viscosity, mixing must be continued until the product has fully cooled down.

Formula TS 495

**SOURCE: Henkel KGaA: Skin Care Project Formulations**

O/W-Collagen-CreamRecipe:

A	Hostaphat KW 340 N	2.00%
	Triceteareth-4 Phosphate	
	Hostacerin DGS	6.00%
	Polyglyceryl-2 PEG-4 Stearate	
	Shea Butter	2.00%
	Mineral oil, low viscosity	3.00%
	Eutanol G	4.00%
	Octyldodecanol	
	Walnut oil	3.00%
	Jojoba oil	3.00%
	Antioxidant	q.s.
B	Carbopol 980	0.40%
	Carbomer	
C	Allantoin	0.20%
	Aquamollin BC pdr.h.c.	0.10%
	Ethylendiamine Tetraacetic Acid-Sodium Salt	
	Citric acid (10% in water)	0.25%
	NaOH (10% in water)	1.60%
	Glycerine	3.00%
	Water	63.05%
	Preservative	q.s.
D	Desamido collagen	8.00%
	Perfume	0.40%

Procedure:

- I Melt A at 70C, then add B. II Heat C to 70C.  
 III Stir II into I. IV Stir until cool.  
 V At 35C add the components of D to IV.  
 VI Homogenize if necessary.  
 Formula A VI/3607

Hand CreamRecipe:

A	Genamin DSAC	2.00%
	Distearyldimonium Chloride	
	Hostacerin DGS	6.00%
	Polyglyceryl-2 PEG-4 Stearate	
	Mineral oil, high viscosity	10.00%
	Isopropyl palmitate	10.00%
B	Water	71.60%
	Preservative	q.s.
C	Perfume	0.40%

Procedure:

- I Melt A at 80C. II Heat B to 80C.  
 III Stir II into I. IV Stir until cool.  
 V At 35C add C to IV.  
 Formula A VI/6550

SOURCE: Hoechst: Guide Formulations for Cosmetics & Toiletries



O/W-CreamRecipe:

A	Hostacerin CG	5.00%
	Cetearyl Alcohol (and) Triceteareth-4 Phosphate (and) PEG-6 Oleamide (and) Sodium C14-17 Sec. Alkyl Sulfonate	
	Mineral oil, high viscosity	10.00%
	Isopropyl palmitate	5.00%
B	Carbopol 980	0.20%
	Carbomer	
C	Aquamollin BC pdr.h.c.	0.10%
	Ethylendiamine Tetraacetic Acid-Sodium Salt	
	Citric acid (10% in water)	0.25%
	NaOH (10% in water)	0.80%
	Water	78.25%
	Preservative	q.s.
D	Perfume	0.40%

Procedure:

- I Melt A at 70C, then add B. II Heat C to 70C.  
 III Stir II into I. IV Stir until cool.  
 V At 35C add D to IV. VI Homogenize if necessary.  
 Formula A VI/1601

O/W-CreamRecipe:

A	Hostacerin KW 340 N	5.00%
	Triceteareth-4 Phosphate	
	Stearic acid	9.00%
	Cetyl alcohol	3.00%
	Mineral oil, high viscosity	4.00%
	Isopropyl palmitate	8.00%
B	Sorbitol (70%)	3.00%
	Water	67.60%
	Preservative	q.s.
C	Perfume	0.40%

Procedure:

- I Melt A at 80C. II Heat B to 80C.  
 III Stir II into I. IV Stir until cool.  
 V At 35C add C to IV. VI Homogenize if necessary.  
 Formula A VI/1700

SOURCE: Hoechst: Guide Formulations for Cosmetics & Toiletries

O/W-CreamRecipe:

A	Hostaphat KW 340 N	2.00%
	Triceteareth-4 Phosphate	
	Hostacerin DGS	7.00%
	Polyglyceryl-2 PEG-4 Stearate	
	Shea Butter	2.00%
	Cetiol SN	6.00%
	Cetearyl Isononanoate	
	Walnut oil	5.00%
	Almond oil	4.00%
	Jojoba oil	3.00%
	Antioxidant	q.s.
B	Carbopol 980	0.40%
	Carbomer	
C	Allantoin	0.30%
	Aquamollin BC pdr.h.c.	0.10%
	Ethylendiamine Tetraacetic Acid-Sodium Salt	
	Citric acid (10% in water)	0.25%
	NaOH (10% in water)	1.60%
	Glycerine	4.00%
	Water	64.35%
	Preservative	q.s.
D	Perfume	0.40%
I	Melt A at 70C, then add B.	II Heat C to 70C.
III	Stir II into I.	IV Stir until cool.
V	At 35C add D to IV.	VI Homogenize if necessary
Formula A VI/1801		

O/W-CreamRecipe:

A	Hostacerin CG	5.00%
	Cetearyl Alcohol (and) Triceteareth-4 Phosphate	
	(and) PEG-6 Oleamide (and) Sodium C14-17 Sec. Alkyl Sulfonate	
	Hostacerin DGS	3.00%
	Polyglyceryl-2 PEG-4 Stearate	
	Mineral oil, low viscosity	8.00%
	Isopropyl palmitate	8.00%
	Cetiol SN	4.00%
	Cetearyl Isononanoate	
	Isopropyl isostearate	4.00%
B	Carbopol 980	0.20%
	Carbomer	
C	Aquamollin BC pdr.h.c.	0.10%
	Ethylendiamine Tetraacetic Acid-Sodium Salt	
	Citric acid (10% in water)	0.25%
	NaOH (10% in water)	0.80%
	Water	70.25%
	Preservative	q.s.
D	Perfume	0.40%
I	Melt A at 70C, then add B.	II Heat C to 70C.
III	Stir II into I.	IV Stir until cool.
V	At 35C add D to IV.	VI Homogenize if necessary
Formula A VI/1604		

SOURCE: Hoechst: Guide Formulations for Cosmetics &amp; Toiletries

O/W-CreamRecipe:

A	Hostacerin DGS	5.00%
	Polyglyceryl-2 PEG-4 Stearate	
	Hostacerin DGL	0.50%
	Polyglyceryl-2 PEG-10 Laurate	
	Isopropyl palmitate	8.00%
	Almond oil	4.00%
	Joboba oil	2.00%
	Wheat germ oil	5.00%
	Sunflower oil	4.00%
	Antioxidant	q.s.
B	Carbopol 980	0.30%
	Carbomer	
C	Aquamollin BC pdr.h.c.	0.10%
	Ethylendiamine Tetraacetic Acid-Sodium Salt	
	Citric acid (10% in water)	0.25%
	NaOH (10% in water)	1.20%
	Water	69.25%
	Preservative	q.s.
D	Perfume	0.40%

Procedure:

- I Melt A at 70C, then add B.      II Heat C to 70C.  
 III Stir II into I.      IV Stir until cool.  
 V At 35C add D into IV.      VI Homogenize if necessary.  
 Formula A VI/1852

O/W-Cream

## Free of ethylenoxide

Recipe:

A	Hostacerin DGMS	5.00%
	Polyglyceryl-2 Stearate	
	Mineral oil, high viscosity	12.00%
	Isopropyl palmitate	8.00%
	Soya oil	5.00%
	Antioxidant	q.s.
B	Carbopol 980	0.20%
	Carbomer	
	Keltrol RD	0.20%
	Xanthan Gum	
C	NaOH (10% in water)	0.80%
	Water	68.20%
	Preservative	q.s.
D	Perfume	0.40%

Procedure:

- I Melt A at 80C, then add B.      II Heat C to 80C.  
 III Stir II into I.      IV Stir until cool.  
 V At 35C add D to IV.      VI Homogenize if necessary.  
 Formula A VI/1750

SOURCE: Hoechst: Guide Formulations for Cosmetics &amp; Toiletries

**O/W-Cream**  
With bacteriostatic effect

**Recipe:**

A	Hostaphat KW 340 N	2.00%
	Triceteareth-4 Phosphate	
	Hostacerin DGS	7.00%
	Polyglyceryl-2 PEG-4 Stearate	
	Mineral oil, low viscosity	5.00%
	Eutanol G	8.00%
	Octyldodecano1	
	Isopropyl isostearate	5.00%
B	Carbopol 980	0.30%
	Carbomer	
C	Octopirox	0.20%
	Piroctone Olamine	
D	1,2-Propylen glycol	10.00%
E	NaOH (10% in water)	0.40%
	Water	61.80%
	Preservative	q.s.
F	Perfume	0.30%

**Procedure:**

I	Melt A at 60C, then add B.	II	Dissolve C in warmed D.
III	Stir II into I.	IV	Heat E to 60C.
V	Stir IV into III.	VI	Stir until cool.
VII	At 35C add F to VI.	VIII	Homogenize if necessary.

Formula A VI/8608

**O/W-Cream**  
Soft

**Recipe:**

A	Hostacerin DGL	1.00%
	Polyglyceryl-2 PEG-10 Laurate	
	Hostacerin DGS	2.00%
	Polyglyceryl-2 PEG-4 Stearate	
	Mineral oil, high viscosity	4.00%
	Isopropyl palmitate	8.00%
	Soya oil	4.00%
	Antioxidant	q.s.
B	Carbopol 980	0.40%
	Carbomer	
C	Aquamollin BC pdr.h.c.	0.10%
	Ethylendiamine Tetraacetic Acid-Sodium Salt	
	Citric acid (10% in water)	0.25%
	NaOH (10% in water)	1.60%
	Glycerine	3.00%
	Water	75.25%
	Preservative	q.s.
D	Perfume	0.40%

**Procedure:**

I	Melt A at 70C, then add B.	II	Heat C to 70C.
III	Stir II into I.	IV	Stir until cool.
V	At 35C add D to IV.	VI	Homogenize if necessary.

Formula A VI/1950

SOURCE: Hoechst: Guide Formulations for Cosmetics & Toiletries

**Protective Moisture Cream**

<u>Ingredient:</u>	<u>%W/W</u>
1 Cutina FS45	4.0
2 Cutina CBS	8.0
3 Cetiol LC	11.0
4 Paraffin oil	5.0
5 Parsol MCX	2.0
6 Parsol 1789	1.0
7 KOH (20%)	1.5
8 Glycerine	5.0
9 Preservative	q.s.
10 Water	to 100.0

This formulation gives a medium weight O/W skin cream with UV protection.

The first six components are melted together at about 85°C. Components 7 & 8 are dissolved in the water, which is then heated to the same temperature. The oil phase is then added to the water phase and dispersed. Mixing should continue down to about 35°C. Formula TS 484

**Very Light Cream**

<u>Ingredient:</u>	<u>%W/W</u>
1 Dehydag Wax E	0.5
2 Eutanol G	4.5
3 Cutina MD	3.5
4 Stenol 16-65	1.2
5 Preservative	q.s.
6 Water	to 100.0

This formulation gives a very light O/W emollient cream.

The first four components are melted together at about 85°C. The water is heated to the same temperature as the oil phase. The oil phase is then added to the water phase and dispersed. At this stage, the mixture needs homogenisation by, for example, a Silverson. Mixing should continue down to about 35°C. Formula TS 483

**Protective Day Cream**

<u>Ingredient:</u>	<u>%W/W</u>
1 Cutina FS45	4.0
2 Cutina CBS	8.0
3 Cetiol B	11.0
4 Paraffin oil	5.0
5 Parsol MCX	2.0
6 Parsol 1789	1.0
7 KOH (20%)	1.5
8 Glycerine	5.0
9 Preservative	q.s.
10 Water	to 100.0

This formulation gives a medium weight O/W skin cream with UV protection.

The first six components are melted together at about 85°C. Components 7 & 8 are dissolved in the water, which is then heated to the same temperature. The oil phase is then added to the water phase and dispersed. Mixing should continue down to about 35°C.

Formula TS 490

SOURCE: Henkel KGaA: Skin Care Project Formulations

Protective Moisturizing Cream

<u>Ingredient:</u>	<u>%W/W</u>
1 Cutina MD	7.0
2 Stenol 16-65	2.0
3 Cetiol MM	5.0
4 Eumulgin B2	3.0
5 Eutanol G	3.0
6 Cetiol SN	7.0
7 Hygroplex HHG (CLR)	4.0
8 Preservative	q.s.
9 Water to	100.0

This formulation gives a rich feeling O/W cream, of medium consistency, which helps to stimulate the skin's natural regenerative powers.

The first six components are heated together to 85C. Component seven is then added to the water and this mixture is also heated to 85C. The oil phase is then mixed into the water phase and dispersed. Mixing should continue down to about 35C. Formula TS 185

Light Repair Cream

<u>Ingredient:</u>	<u>%W/W</u>
1 Cutina MD	3.5
2 Sipol 16-18 C50	1.5
3 Cetiol MM	4.0
4 Eumulgin B2	1.5
5 Eutanol G	5.0
6 Myritol 318	5.0
7 Repair Complex CLR	5.0
8 Collagen CLR	2.0
9 Elastin CLR	2.0
10 Preservative	q.s.
11 Water to	100.0

This formulation gives a very light feeling O/W cream which helps to prepare the skin before sunbathing, by enhancing the speed of cell renewal.

The first six components are heated together to 85C. The water is heated to the same temperature. The oil phase is then mixed into the water phase and dispersed. Mixing should continue down to about 35C. Components seven to nine can then be incorporated, and the product homogenised. Formula TS 253

SOURCE: Henkel KGaA: Skin Care Project Formulations

Rejuvenating Cream W/O

	%W/W
I Dehymuls F	10.0
Cetiol V	10.0
Eutanol G	6.0
Vaseline, white	16.0
Microwax HP 67	3.0
Epidermin in oil	1.0
II Henkel Glycerin 86% DAB 9	3.0
Magnesium sulfate-7-hydrate	0.3
Water	50.7

Formula No. A15-13

Herbal Cream W/O

	%W/W
I Dehymuls F	7.0
Novata AB	5.0
Cetiol V	5.0
Eutanol G	5.0
Vaseline, white	10.0
Calendula oil CLR	3.0
Oil of St. John's wort CLR	3.0
II Henkel Glycerin 86% DAB 9	3.0
Magnesium sulfate-7-hydrate	0.3
Water	58.7

Formula No. A15-14

Vitamin Cream W/O

I Dehymuls F	7.0
Cetiol V	10.0
Eutanol G	6.0
Vegetable oil	8.0
Vaseline, white	12.0
Vitamin E Grandelan spec.	2.5
II Henkel Glycerin 86% DAB 9	3.0
Magnesium sulfate-7-hydrate	0.3
Water	51.2

Formula No. A15-15

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Replenishing CreamIngredients:

	%
Phase A:	
H <sub>2</sub> O, Deionized	73.48
Carbopol 934	0.20
Propylene Glycol	3.00
Methyl Paraben	0.25
Phase B:	
Hest CSO (Cetearyl Octanoate)	6.00
Hest MS (Myristyl Stearate)	3.50
Hetoxamate SA-100 (PEG-100 Stearate)	2.00
Hetan SS (Sorbitan Stearate)	2.00
Hetoxol P (Emulsifying Wax)	2.00
Hetoxol G (Stearyl Alcohol & Ceteareth 20)	0.60
Dimethicone 350	0.80
Parsol MCX	2.00
Vitamin E Acetate	0.25
Propyl Paraben	0.15
Phase C:	
H <sub>2</sub> O, Deionized	1.00
TEA 99%	0.22
Phase D:	
Sodium Hyaluronate (1%)	1.00
Soluble Collagen	0.25
Phase E:	
H <sub>2</sub> O, Deionized	1.00
Germall 115	0.30

Procedure:

- 1) In a stainless steel kettle equipped with a Lightnin' type mixer add H<sub>2</sub>O. Slowly sprinkle Carbopol 934 into vortex while mixing until free of lumps.
- 2) Add balance of Phase A, heat to 75C. In a separate kettle, combine ingredients of Phase B, heat to 75C while mixing.
- 3) Add B to A. Mix until uniform. Avoid aeration.
- 4) Add Phase C premixed and cool to 40C.
- 5) At 40C, add Phase D to batch.
- 6) Premix Phase E, add to batch.
- 7) Mix until uniform.

Specifications:

pH: 6.80

Viscosity, #4/6 RPM: 65000

SOURCE: Heterene, Inc.: Formula HC 91-12-1



**Ritavena Hand and Body Cream**

A natural hand and body cream designed around the benefits of colloidal oats (Ritavena) to provide natural skin therapeutic moisturization and softening.

<u>Ingredients:</u>	<u>%W/W</u>	<u>Function</u>
1. Distilled/Deionized Water	10.00	----
2. Ritavena-5 (Hydrolyzed Oat Flour)	1.00	Natural Moisture
3. Distilled/Deionized Water	65.20	----
4. Sorbitol	3.50	Humectant
5. Methylparaben	0.15	Preservative
6. Forlan 500 (R.I.T.A. Blend)	6.00	Emolliency
7. Rita CA (Cetyl Alcohol)	2.50	Emulsifier
8. Mineral Oil (130-SUS-Penreco)	8.00	Emolliency
9. Rita Stearic Acid	2.00	Emulsifier
10. Propylparaben	0.05	Preservative
11. Triethanolamine @ 50%	0.80	pH
12. Germall II @ 25%	0.80	Preservative

**Compounding Procedure:**

Heat first water to 100C (boiling), add item 2 and mix in blender for 2 minutes. Heat items 3-5 to 75C. In separate beaker heat items 6-10 to 75C. Combine with agitation. Add item 11 and maintain heat and agitation for 10 minutes. Add Ritavena mixture and mix until uniform. Cool with agitation. At 45C add preservative.

Ref. No. 116-33

**Therapeutic Barrier Cream**

Elegant water in oil emulsion which resists chemicals and oils better than silicone systems. Based on Ritaplast to maximize barrier properties.

<u>Ingredients:</u>	<u>%W/W</u>	<u>Function</u>
1. Mineral Oil	24.50	Oil-Out
2. Ritaplast (Barrier Base)	20.00	Barrier
3. R.I.T.A. Beeswax, Natural	13.00	Barrier
4. Lanolin USP	10.00	Barrier
5. Ritalan C (Isopropyl Palmitate and Lanolin Oil)	2.00	Film
6. Propylparaben	0.10	Preservative
7. Ritahydrox (Hydroxylated Lanolin)	0.30	Anchor
8. Distilled/Deionized Water	28.50	----
9. Borax	1.30	Stability
10. Methylparaben	0.10	Preservative
11. Fragrance	0.20	Odor

**Compounding Procedure:**

Heat items 1-7 and items 8-10 to 165F in separate containers. Add oil phase to water phase with mixing. Cool to 120F and add fragrance.

Ref. No. 116-18

SOURCE: R.I.T.A. Corp.: Skin Care Formulary

Skin Cream

	Wt%
A. Squalane	4.0
Beeswax	1.0
Amiter LG-OD	2.0
Cetyl Octanoate (Emalex CC-168)*	3.0
Hydrogenated Oil (Emalex S.T.G.-R.)*	4.0
Behenyl Alcohol	1.5
Stearic Acid	3.0
Propylene Glycol Monostearate	1.0
Glyceryl Monostearate, Self Emulsifying (Emalex GMS-7CAE)*	5.0
Dimethylpolysiloxane (300 c.s.)	0.4
Butylparaben	0.1
Amihope LL	1.0
B. CAE	0.5
Glycerin	5.0
Hydroxyethylcellulose (1% aq. soln.)	10.0
Methylparaben	0.2
Water	58.3
*Nihon Emulsion Co.	

**Procedure:**

1. Mix (A) at 80C.
2. Mix (B) at 80C.
3. Add (A) to (B).
4. Mix them with a homomixer, and then cool slowly to 30C.

**Note:**

This skin cream spreads well.

Skin Cream

	Wt%
A. Liquid Petrolatum	17.0
Cetanol	3.0
Propylene Glycol Monostearate	1.0
Glyceryl Monostearate; Self Emulsifying (HLB 5) (Emalex GMS-45RT; Nihon Emulsion Co.)	3.0
POE (10) Monostearate	2.0
POE (30) Monostearate	1.0
Butylparaben	0.1
Amihope LL	5.0
B. 1,3-Butylene Glycol	5.0
Acylglutamate HS-11	0.3
Methylparaben	0.2
Water	62.4

**Procedure:**

1. Mix (A) at 80C.
2. Mix (B) at 80C.
3. Add (B) to (A).
4. Mix them with a homomixer.
5. Cool them slowly to 30C.

**Note:**

This skin cream has low friction touch after use.

SOURCE: Ajinomoto USA, Inc.: Suggested Formulations

Skin Cream, Anhydrous

	%W/W
Lanette 16	10.0
Cetiol V	25.0
Cutina BW	15.0
Vaseline, white	35.0
Hard paraffin 52C	5.0
Wool fat, anhydrous	10.0
Formula No. A17-04	

Skin Cream O/W Transparent in Gel Form

	%W/W
I Eumulgin B3	13.0
Cetiol HE	20.0
Eutanol G	5.0
II Water	62.0

## Preparation:

Eumulgin B3 and the fatty substances are melted on the water bath at 95C and the water is added to the fat melt also at 95C. The gel produced is stirred while cooling and perfume is added at 60C. The gel is cooled and stirring continued, although the stirring process should be terminated after a short while to avoid air pockets. In order to obtain the desired transparency, it is essential to observe the temperature specified.

Formula No. A17-05

Cream Base, Anhydrous

	%W/W
Cutina HR	6.0
Myritol 318	46.5
Cetiol SN	20.0
Eutanol G	20.0
Mg-Siel pharma	7.5
Formula No. A17-06	

Skin Cream, Anhydrous

	%W/W
Lanette 16	10.0
Dehymuls LS	10.0
Beeswax, white	15.0
Hard paraffin 52C	5.0
Vaseline, white	35.0
Cetiol V	25.0
Formula No. A17-07	

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Skin Cream O/W

	<u>%W/W</u>
I Cutina GMS	12.0
Lanette O	1.0
Cutina E24	3.0
Eumulgin B2	1.0
Cetiol SB45	20.0
Eutanol G	10.0
II 1,2-propylene glycol	5.0
Water	48.0

Formula No. A12-28

Skin Cream O/W with Shea Butter

	<u>%W/W</u>
I Cutina GMS	12.0
Lanette O	1.0
Eumulgin B2	1.0
Cutina E24	2.0
Cetiol SB45	5.0
IPP	5.0
II Henkel Glycerin 86% DAB 9	5.0
Water	69.0

Formula No. A12-29

Skin Cream O/W with Shea Butter

	<u>%W/W</u>
I Cutina GMS	12.0
Lanette O	1.0
Cutina E24	3.0
Eumulgin B2	1.0
Cetiol SB 45	15.0
Eutanol G	4.0
Cetiol SN	4.0
II 1,2-propylene glycol	3.0
Water	57.0

Formula No. A12-30

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Skin Cream O/W

	<u>%W/W</u>
I Cutina E24	5.0
Cutina MD	10.0
Lanette O	2.0
Eutanol G	4.0
Myritol 318	4.0
Cetiol B	8.0
II Henkel Glycerin 86% DAB 9	5.0
Water	62.0

Note: High-fatting  
Formula No. A12-19

Skin Cream O/W Fluid Type

	<u>%W/W</u>
I Cutina E24	4.0
Cutina MD	6.0
Lanette O	1.5
Cetiol B	8.0
II Henkel Glycerin 86% DAB 9	5.0
Water	75.5

Note: Soft consistency, fluid  
Formula No. 12-20

Skin Cream W/O

	<u>%W/W</u>
I Dehymuls F	8.0
Novata AB/Cetiol MM	5.0
Eutanol G	3.0
Vaseline	15.0
Paraffin oil, high viscous	3.0
II Henkel Glycerin 86% DAB 9	5.0
Magnesium sulfate-7-hydrate	0.3
Water	60.7

Formula A12-21

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Skin Cream O/W  
(Soft Cream)

	<u>%W/W</u>
I Cutina MD	4.0
Cutina CP	4.0
Eumulgin B1	1.0
Eumulgin B2	1.0
Cetiol B	5.0
II Carbopol 940	0.5
Triethanolamine	0.5
Henkel Glycerin 86% DAB 9	3.0
Water	81.0

Note: This model formula constitutes a particularly soft, smooth and easy-to-apply o/w-type cream.  
Formula A11-18

Day Cream O/W

	<u>%W/W</u>
I Cutina E24	4.0
Cutina MD	15.0
Eutanol G	3.0
Cetiol B	3.0
II Henkel Glycerin 86% DAB 9	5.0
Water	70.0

Note: Soft consistency, low fatting  
Formula A11-19

Day Cream O/W  
(Soft Cream)

	<u>%W/W</u>
I Cutina CBS	12.0
Eumulgin B1	1.5
Eumulgin B2	1.5
Cetiol SN	4.0
Eutanol G	4.0
Isopropyl palmitate	6.0
II Henkel Glycerin 86% DAB 9	5.0
Water	66.0

Formula A11-20

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Skin Cream, Tinted Matting O/W

	<u>%W/W</u>
I Cutina MD	3.5
Lanette O	1.2
Siebert Stearin L2 SM	2.0
Cholesterin	0.5
Paraffin oil, high viscous	3.0
Pigment colors	2.5
II Luviskol K30	1.5
Allantoin	0.3
1,2-propylene glycol	2.0
Triethanolamine	1.0
Water	82.5

Formula No. P12-01

Skin Cream, Tinted, with Pearly Gloss O/W

	<u>%W/W</u>
I Cutina MD	3.5
Lanette O	1.2
Siebert Stearin L2 SM	2.0
Cholesterin	0.5
Paraffin oil, high viscous	3.0
Pigment colors	2.5
II Luviskol K30	1.5
Allantoin	0.3
Triethanolamine	1.0
1,2-propylene glycol	2.0
Veegum solution 4%	20.0
Water	57.5
III Timiron Starluster MP 115	5.0

Formula No. P12-02

Rouge Cream, Anhydrous

	<u>%W/W</u>
I Cutina LM	79.0
Eutanol G	15.0
II Pigment colors	4.0
Cosmetic titanium dioxide 300309	2.0

Formula No. P13-01

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Skin Cream W/O

	<u>%W/W</u>
I Dehymuls F	12.0
Vaseline	35.0
Paraffin oil, liquid	15.0
Microwax HP 67	2.0
II Henkel Glycerin 86% DAB 9	5.0
Magnesium sulfate-7-hydrate	0.3
Water	30.7

Formula A12-22

Skin Cream W/O

	<u>%W/W</u>
I Dehymuls F	12.0
Vaseline, white	30.0
Paraffin oil, liquid	15.0
Microwax HP 67	2.0
II Henkel Glycerin 86% DAB 9	5.0
Magnesium sulfate-7-hydrate	0.3
Water	35.7

Formula A12-23

Skin Cream W/O

	<u>%W/W</u>
I Dehymuls F	10.0
Dehymuls LS	10.0
Cetiol V	10.0
Vegetable oil	7.0
Vaseline, white	15.0
Paraffin oil, liquid	10.0
Microwax	4.0
II Henkel Glycerin 86% DAB 9	3.0
Magnesium sulfate-7-hydrate	0.3
Water	30.7

Formula A 12-24

SOURCE: Henkel KGaA: Cosmetic Model Formulae



Skin Cream W/O

	<u>%W/W</u>
I Dehymuls F	10.0
Cetiol V	10.0
Vegetable oil	7.0
Vaseline, white	25.0
Paraffin oil, low viscous	10.0
Microwax HP 67	4.0
II Henkel Glycerin 86% DAB 9	3.0
Magnesium sulfate-7-hydrate	0.3
Water	30.7

Note: High-fatting

Example of a w/o-type cream with extremely low water content, good heat stability and smooth structure.

Formula No. A12-16

Care Cream W/O

	<u>%W/W</u>
I Dehymuls F	8.0
Cetiol V	8.0
Vegetable oil	15.0
Vaseline, white	20.0
Paraffin oil, low viscous	5.0
II Henkel Glycerin 86% DAB 9	3.0
Magnesium sulfate-7-hydrate	0.3
Water	40.7

Note: Very soft cream structure

Formula No. A12-17

Skin Cream W/O

	<u>%W/W</u>
I Dehymuls F	8.0
Cetiol V	7.0
Vegetable oil	12.0
Vaseline, white	25.0
Paraffin oil, low viscous	12.0
Microwax HP 67	2.0
II Henkel Glycerin 86% DAB 9	3.0
Magnesium sulfate-7-hydrate	0.3
Water	30.7

Note: High-fatting

Formula No. A12-18

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Skin Cream W/O with Collagen

	<u>%W/W</u>
I Dehymuls K	25.0
Cetiol V	6.0
Paraffin oil, high viscous	4.0
Vaseline, white	5.0
II Magnesium sulfate-7-hydrate	0.3
Water	54.7
III Collagen	5.0

Note: pH setting 3.7 to 6.5

Preparation: Heat I to 70C, gradually stir in II at 75C,  
add III to the cream at 35C.

Formula No. A15-07

Care Cream O/W with Azulene and Allantoin

	<u>%W/W</u>
I Cutina KD 16	16.00
Eumulgin B1	1.00
Eutanol G	12.00
Myritol 318	4.00
Paraffin oil, high viscous	6.00
II Allantoin	0.20
1,2-propylene glycol	3.00
Water	57.75
III Azulene solution 25% a.s.	0.05

Set pH to 7

Note: Medium-fatting, medium soft consistency, light blue tint  
due to azulene additive.

Formula No. A15-08

Anti-Wrinkle Cream, Anhydrous

	<u>%W/W</u>
Dehymuls K	24.98
Cetiol V	16.00
Cetiol SN	5.00
Cutina BW	10.00
Vaseline, white	35.00
Wheatgerm oil, spec.	3.00
Vitamin oil Biocorno	4.00
Extrapon VC	1.00
Carrot oil CLR	1.00
Oxynex 2004	0.02

Formula No. A15-09

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Skin Cream W/O with St. John's Wort Oil

	%W/W
I Dehymuls F	7.0
Eutanol G	5.0
Cetiol V	5.0
Cetiol MM	5.0
Vaseline	10.0
Calendula oil	3.0
St. John's wort oil	3.0
II Henkel Glycerin 86% DAB 9	3.0
Magnesium sulfate-7-hydrate	0.3
Water	58.7

Formula No. A15-19

Skin Cream O/W with Avocado Oil

	%W/W
I Lamecreme LPM	8.0
Lamecreme SA 7	0.5
Lanette 16	2.0
Cutina CP	5.0
Wool fat	2.5
Avocado oil	3.0
Cegesoft C24	4.0
Silicon oil AK 350	0.5
Paraffin oil	4.5
II Henkel Glycerin 86% DAB 9	5.0
Water	64.8
III Perfume	0.2

Formula No. A15-20

Glycerine Cream O/W with Silicone

	%W/W
I Lanette 16	2.0
Cutina MD	14.0
Eumulgin B1	3.0
Eutanol G	10.0
Baysilon-Oil M300	5.0
II Henkel Glycerin 86% DAB 9	30.0
Water	35.8
III Cremogen camomile	0.2

Preparation: Heat phase I to 75C, stir in phase II at 80C, add phase III to the cream at 40C.

Formula No. A16-01

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Skin Cream W/O with Shea Butter

	<u>%W/W</u>
I Dehymuls F	8.0
Cetiol SB 45	10.0
Cetiol V	6.0
Cetiol 868	4.0
Vaseline, white	12.0
II Henkel Glycerin 86% DAB 9	5.0
Magnesium sulfate-7-hydrate	0.3
Water	54.7

Formula No. A12-25

Skin Cream W/O Shea Butter

	<u>%W/W</u>
I Dehymuls F	8.0
Cetiol SB 45	10.0
Cetiol 868	5.0
Vaseline, white	15.0
Paraffin oil, low viscous	5.0
II Henkel Glycerin 86% DAB 9	5.0
Magnesium sulfate-7-hydrate	0.3
Water	51.7

Formula A12-26

Skin Cream O/W

	<u>%W/W</u>
I Cutina CBS	14.0
Cutina E24	3.0
Eumulgin B2	1.0
Cetiol SB 45	20.0
Eutanol G	5.0
II 1,2-propylene glycol	5.0
Water	52.0

Formula A12-27

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Skin Protecting Cream O/W with Silicone

	<u>%W/W</u>
I Lanette O	8.0
Eumulgin B1	1.5
Eumulgin B2	1.5
Cetiol SN	15.0
Paraffin oil, high viscous	5.0
Baysilon-Oil M300	5.0
II Henkel Glycerin 86% DAB 9	6.0
Water	58.0

Formula No. A17-01

Skin Protecting Cream O/W Against Solvents

	<u>%W/W</u>
I Lanette N/SX	6.0
Siebert Stearin L2SM	6.0
Eutanol G	8.0
Talc	5.0
Kaolin	5.0
II Henkel Glycerin 86% DAB 7	10.0
Triethanolamine	0.3
Dehydrol 7000-3% solution	30.0
Water	29.7

Formula A17-02

Skin Protecting Cream W/O Against Aqueous Solutions

	<u>%W/W</u>
I Dehymuls E	7.0
Vaseline, white	10.0
Cetiol V	5.0
Paraffin oil, high viscous	5.0
Zinc oxide	10.0
Talc	10.0
II Water	53.0

Formula No. A17-03

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Smoothing Care Cream

<u>Ingredient:</u>	<u>%W/W</u>
1 Cutina FS45	6.0
2 Cetiol LC	11.0
3 Lorol C16	1.5
4 Lorol C18	1.5
5 Cutina MD	3.0
6 KOH (20%)	2.0
7 Preservative	q.s.
8 Water	to 100.0

This formulation gives a very hard, heavy weight O/W skin cream with an exceptionally smooth, enriching feel.

The first five components are melted together at about 85C. Component 6 is dissolved in the water to the same temperature. The oil phase is then added to the water phase and dispersed. Mixing should continue down to about 35C.  
Formula TS 500

Emollient Care Cream

<u>Ingredient:</u>	<u>%W/W</u>
1 Cutina FS25	5.0
2 Cetiol B	9.0
3 Lorol C16	1.5
4 Lorol C18	1.5
5 Cutina MD	3.0
6 KOH (20%)	1.75
7 Preservative	q.s.
8 Water	to 100.0

This formulation gives a soft, medium weight O/W skin cream.

The first five components are melted together at about 85C. Component 6 is dissolved in the water which is heated to the same temperature. The oil phase is then added to the water phase and dispersed. Mixing should continue down to about 35C.  
Formula TS 501

Night Cream

<u>Ingredient:</u>	<u>%W/W</u>
1 Emulgade CL special	20.0
2 Silicone Oil M100	1.0
3 Fragrance	q.s.
4 Preservative	q.s.
5 Water	to 100.0

This formulation gives an O/W cream which has a rich, smoothing feel on the skin.

Components 1 and 2 are added to the water and the mixture is heated to about 85C. The mixture is vigorously mixed until homogeneous. It can then be cooled, with moderate mixing down to about 35C.  
Formula TS 510

SOURCE: Henkel KGaA: Skin Care Project Formulations

Soft Touch Cleansing Cream

	%W/W
A. Carbopol 940-2% Aq. Sol'n.	50.0
1,3-Butylene Glycol	12.0
Tween 20	0.5
Tween 80	0.5
Deionized Water	8.0
B. Mineral Oil, Heavy	20.0
Arlacel 60	1.0
Proto-Lan 8*	3.0
Solulan 98	1.0
C. Glydant DMDMH-55	0.3
May-Tein KTS (Sodium/TEA Lauryl Hydrolyzed Keratin)	2.0
Triethanolamine-99%	1.5
D. Fragrance	0.2
*(Lecithin (and) Butyl Stearate (and) Cocoyl Hydrolyzed Collagen (and) Oleoyl Sarcosine (and) Sesame Oil (and) Lanolin Alcohol)	

Procedure:

Heat Phase A & B separately to 80C. Add B to A with mixing. Add C. Mix carefully to avoid entrapping air. Mix and cool to 40C. Add D.

Properties:

A mild, creamy facial cleanser which leaves a smooth after-feel. May be washed off or rinsed off with water. Non-drying.

SOURCE: Maybrook Inc.: Formula #SW-3241

Care Cream

Solid cream. Good spreadability, good absorption. Leaves a pleasant soft touch.

Material/CTFA-Index:

A. Emulgator E2155/Stearyl Alcohol (and) Steareth-7 (and) Steareth-10	6.00%
Isopropylmyristat/Isopropyl Myristate	10.00
Stearylalcohol/Stearyl Alcohol	1.00
Paraffinol/Mineral Oil	3.00
Wacker-Belsil DM 100/Dimethicone	2.00
Wacker-Belsil SM-6018/Stearyl Methicone	5.00
B. Glycerin/Glycerine	3.00
Wasser dest./Water	70.00
Preservatives, fragrances, pigments	q.s.

Heat A and B to 65C, mix and homogenize, cool whilst stirring.

SOURCE: Wacker Silicone: Formulation 1325 AH

**Sunflower Oil Cream**

<u>Ingredient:</u>	<u>%W/W</u>
1 Eumulgin B2	3.0
2 Monomuls 60-35	3.1
3 Novata AB	4.8
4 Sunflower Oil	10.2
5 Lorol C16	2.05
6 Lorol C18	2.05
7 Preservative	q.s.
8 Water	to 100.0

This formulation gives an O/W Cream, with good spreading and a medium weight feel.

The first six components are heated together to 85C. The water is also heated to 85C. The oil phase can then be added to the water phase and dispersed. Mixing should continue down to about 35C.

Formula TS 417

**Sunflower Oil Cream with Protein**

<u>Ingredient:</u>	<u>%W/W</u>
1 Eumulgin B2	3.0
2 Monomuls 60-35	3.1
3 Novata AB	4.5
4 Sunflower Oil	10.2
5 Lorol C16	2.05
6 Lorol C18	2.05
7 Gluadin AGP	1.0
8 Preservative	q.s.
9 Water	to 100.0

This formulation gives an O/W Cream, with good spreading and a medium weight feel.

The first six components are heated together to 85C. Component seven is dissolved in the water and this mixture is also heated to 85C. The oil phase can then be added to the water phase and dispersed. Mixing should continue down to about 35C.

Formula TS 418

**Light Moisturizing Cream**

<u>Ingredient:</u>	<u>%W/W</u>
1 Eumulgin B2	3.0
2 Myritol 318	10.0
3 Cetiol SB45	5.1
4 Monomuls 60-35	5.0
5 Sipol 1618 C50	2.2
6 Hygroplex HHG	2.0
7 Preservative	q.s.
8 Water	to 100.0

This formulation gives a light O/W cream with natural moisturising effect.

The first five components are melted together at about 85C. Component 6 is dissolved in the water and heated to the same temperature as the oil phase. The oil phase is then added to the water phase and dispersed. Mixing should continue down to about 35C.

Formula TS 460

SOURCE: Henkel KGaA: Skin Care Project Formulations



Tinted-Day-CreamRecipe:

A	Hostaphat KW 340 N	3.00%
	Triceteareth-4 Phosphate	
	Hostacerin DGS	8.00%
	Polyglyceryl-2 PEG-4 Stearate	
	Cocoa Butter	1.00%
	Cocos oil	9.00%
	Walnut oil	5.00%
	Neo-Heliopan AV	0.90%
	Octyl Methoxycinnamate	
	Neo-Heliopan BB	0.10%
	Benzophenone-3	
	Antioxidant	q.s.
B	Water	38.75%
	Aquamollin BC pdr. h.c.	0.10%
	Ethylendiamine Tetraacetic Acid-Sodium Salt	
	Citric acid (10% in water)	0.25%
	Preservative	q.s.
C	Magnabrite HV (4% in water)	17.50%
	Magnesium Aluminum Silicate	
D	Titanium dioxide	6.00%
	Talcum	1.00%
	Pigment Sicopharm yellow	0.60%
	Pigment Sicopharm red	0.40%
	Pigment Sicopharm black	0.10%
E	Desaron	5.00%
	Desamido Collagen (and) Hyaluronic Acid	
	Hygroderm	3.00%
	"Moisturizing"-Factor	
	Perfume	0.30%

Procedure:

- I Melt A at 70C.
- II Heat B to 70C.
- III Stir II into I.
- IV Stir until cool.
- V Add D into C, then homogenize.
- VI At 35C stir V into IV, then add the components of E.

SOURCE: Hoechst: Guide Formulations for Cosmetics & Toiletries:  
Formula A VI/3608

Universal Day Cream O/W

	<u>%W/W</u>
I Cutina MD	15.0
Eumulgin SMO 20	4.0
Eutanol G	4.0
Cetiol B	5.0
Cetiol LC	3.0
II Henkel Glycerin 86% DAB 9	3.0
Water	66.0
Formula No. A11-25	

Universal Day Cream O/W

	<u>%W/W</u>
I Cutina MD	15.0
Dehymuls SMO	1.0
Eumulgin SMO 20	4.0
Eutanol G	4.0
Cetiol B	5.0
Cetiol LC	3.0
II Henkel Glycerin 86% DAB 9	3.0
Water	65.0
Formula No. A11-26	

Day Cream O/W

	<u>W/W</u>
I Cutina MD	14.0
Eumulgin SMO 20	4.0
Eutanol G	3.0
Cetiol S	3.0
Lanette O	1.0
II Henkel Glycerin 86% DAB 9	3.0
Water	72.0
Formula No. A11-27	

Skin Cream O/W

	<u>%W/W</u>
I Cutina MD	14.0
Dehymuls SML	1.0
Eumulgin SML 20	3.0
Eutanol G	5.0
Cetiol B	5.0
Lanette O	0.5
II Henkel Glycerin 86% DAB 9	5.0
Water	66.5
Formula No. A11-28	

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Universal Skin Cream O/W

	<u>%W/W</u>
I Cutina MD	14.0
Dehymuls SML	2.5
Eumulgin SML 20	1.5
Eutanol G	5.0
Cetiol B	5.0
Lanette O	1.0
II Henkel Glycerin 86% DAB 9	3.0
Water	68.0

Formula A11-29

Skin Cream O/W With Pleasurable Melting-on Effect

	<u>%W/W</u>
I Cutina MD	10.0
Lanette O	2.0
Eumulgin B1	1.5
Eumulgin B2	1.5
Novata AB/Cetiol MM	5.0
Eutanol G	10.0
Paraffin oil, high viscous	5.0
II Henkel Glycerin 86% DAB 9	5.0
Water	60.0

Formula A11-30

Day Cream O/W

	<u>%W/W</u>
I Cutina MD	14.00
Forlanit E	1.00
Eutanol G	4.00
Paraffin oil, high viscous	2.00
II 1,2-propylene glycol	5.00
Triethanolamine	0.19
Water	73.81

Formula A11-31

Day Cream O/W

	<u>%W/W</u>
I Emulgade CA/CL spec.	25.0
II Water	75.0

Formula A11-33

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Universal Skin Cream W/O

	<u>%W/W</u>
I Dehymuls K	20.0
Cetiol V	5.0
Vegetable oil	5.0
Vaseline, white	5.0
II Water	65.0

Note: Medium fattening, medium solid consistency  
Formula No. A13-01

Universal Skin Cream W/O

	<u>%W/W</u>
I Dehymuls K	25.0
Myritol 318	10.0
Vaseline, white	5.0
II Water	60.0

Note: Medium fattening, medium solid consistency  
Formula No. A13-02

Universal Skin Cream W/O Hydrocarbon-Free

	<u>%W/W</u>
I Dehymuls E	15.0
Cetiol V	15.0
Vegetable oil	5.0
II Water	65.0

Note: Medium fattening, w/o-type cream with a soft consistency,  
model formula without vaseline.  
Formula No. A13-03

Universal Skin Cream W/O

	<u>%W/W</u>
I Dehymuls E	7.0
Cetiol V	6.0
Cutina BW	3.0
Vaseline, white	12.0
Paraffin oil, high viscous	6.0
II Magnesium sulfate-7-hydrate	0.3
Henkel glycerin 80% DAB 9	5.0
Water	60.7

Note: Medium fattening  
Formula A13-04

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Universal Skin Cream W/O

	<u>%W/W</u>
I Dehymuls K	22.0
Cetiol V	3.0
Cutina BW	3.0
Vaseline, white	5.0
Paraffin oil, high viscous	3.0
II Magnesium sulfate-7-hydrate	0.3
Henkel Glycerin 86% DAB 9	5.0
Water	58.7

Note: Medium fatting  
Formula No. A13-05

Universal Skin Cream W/O

	<u>%W/W</u>
I Dehymuls K	30.0
Cetiol V	4.0
Paraffin oil, high viscous	5.0
II Magnesium sulfate-7-hydrate	0.3
Henkel Glycerin 86% DAB 9	5.0
Water	55.7

Note: Medium fatting  
Formula No. A13-06

Universal Skin Cream W/O

	<u>%W/W</u>
I Dehymuls F	8.0
Novata AB	5.0
Eutanol G	3.0
Vaseline, white	15.0
Paraffin oil, low viscous	3.0
II Henkel Glycerin 86% DAB 9	5.0
Magnesium sulfate-7-hydrate	0.3
Water	60.7

Note: This skin cream is an example of the possible uses of the Novata solid triglycerides. The addition of Novata AB enhances the overall structure of the cream; it allows the hydrocarbon shares either to be reduced or to be replaced completely. The addition of a maximum of 6% triglyceride improves the melting properties of creams on the skin.

Formula No. A13-07

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Universal Skin Cream W/O

	<u>%W/W</u>
I Dehymuls F	8.0
Vaseline, white	15.0
Paraffin oil, low viscous	8.0
II Henkel Glycerin 86% DAB 9	3.0
Magnesium sulfate-7-hydrate	0.3
Water	65.7

Formula No. A13-08

Universal Skin Cream W/O

	<u>%W/W</u>
I Dehymuls F	8.0
Novata AB	5.0
Eutanol G	3.0
Vaseline, white	15.0
Paraffin oil, low viscous	3.0
Microwax HP 67	2.0
II Henkel Glycerin 86% DAB 9	3.0
Magnesium sulfate-7-hydrate	0.3
Water	60.7

Note: This skin cream is an example of the possible uses of the Novata solid triglycerides. The addition of Novata AB enhances the overall structure of the cream; it allows the hydrocarbon shares either to be reduced or to be replaced completely. The addition of a maximum of 6% triglyceride improves the melting properties of creams on the skin.

Formula No. A13-09

Skin Cream W/O

	<u>%W/W</u>
I Dehymuls K	20.0
Dehymuls LS	5.0
Cetiol V	10.0
Myritol 318	10.0
II Water	55.0

Formula No. A13-10

Source: Henkel KGaA: Cosmetic Model Formulae

**Urban Protection Day Cream**

This light textured day cream contains an effective level of natural antioxidants to provide protection from urban environmental influences. The antioxidants are in the form of liposomes as Dermalome SOD and Dermalome E to provide enhanced penetration and efficacy and the Protein-bound Biomin SE/P/C.

<u>Ingredients/C.T.F.A.:</u>	<u>% by Weight</u>
Demineralized Water	65.00
Carbopol 1342, 2%/Carbomer	15.00
Glycerine	2.00
Brookswax D/Cetearyl Alcohol (and) Ceteareth-20	1.00
Finsolv TN/C12-15 Alcohols Benzoate	2.00
DC 200 Fluid, 350 cs/Dimethicone	0.50
Germaben II-E/Propylene Glycol (and) Diazolidinyl Urea (and) Methylparaben (and) Propylparaben	1.00
Biomin Se/P/C/Selenium Polypeptides	0.30
Dermalome SOD/Lecithin (and) Superoxide Dimutase	10.00
Dermalome E/Lecithin (and) Tocopheryl Acetate	3.00
AMP-95/Aminomethylpropanol	0.20

**Procedure:**

1. Disperse the Carbopol in water while heating to 75C.
2. Add the Glycerin and mix well.
3. Blend the Finsolv TN, Brookswax D, and Silicone Fluid at 70C until uniform and add to water phase. Mix until uniform.
4. Add the AMP-95 and mix until uniform with fast propellor agitation.
5. Cool to 50C and add the Biomin SE/P/C and Germaben with sweep agitation.
6. Cool to 35C and add the Dermalomes.
7. Fragrance as desired and mix well.
8. Adjust pH to 5.0 with Citric Acid if required.

Formulation PF-0163 suggested by Brooks Industries, Inc.

SOURCE: Angus Chemical Co.: Angus Product Formulary

Vitamin Cream O/W

	<u>%W/W</u>
I Cutina KD16	16.0
Eumulgin B1	1.0
Eutanol G	12.0
Vitamin oil Biocorno	5.0
Vitamin F glycerine ester	3.0
II Henkel Glycerin 80% DAB 9	5.0
Water	58.0
Set pH to 7	
Formula No. A15-01	

Vitamin Cream W/O

	<u>%W/W</u>
I Dehymuls K	30.0
Vegetable oil	10.0
Vitamin E Grandelan spec.	5.0
Vitamin F glycerine ester	5.0
II Henkel Glycerin 86% DAB 9	5.0
Water	45.0
Formula No. A15-02	

Vitamin Cream with Placenta Extract O/W

	<u>%W/W</u>
I Cutina MD	15.0
Eumulgin B1	3.0
Eutanol G	10.0
Paraffin oil, high viscous	3.0
Wheat germ oil spec.	2.0
Placenta liquid, oil-soluble	3.0
II Water	64.0

Note: Soft consistency

Formula No. A15-03

SOURCE: Henkel KGaA: Cosmetic Model Formulae



Vitamin Cream W/O

	%W/W
I Dehymuls F	7.0
Cetiol V	7.0
Myritol 318	6.0
Vaseline, white	10.0
Vitamin oil Biocorno	6.0
II Henkel Glycerin 86% DAB 9	3.0
Magnesium sulfate-7-hydrate	0.3
Water	60.7

Formula No. A15-16

Vitamin Cream O/W

	%W/W
I Cutina E24	4.0
Cutina MD	5.0
Lanette O	2.0
Cetiol B	8.0
Myritol 318	6.0
Vitamin F glycerine ester CLR	3.0
II Henkel Glycerin 86% DAB 9	5.0
Water	67.0

Formula No. A15-17

Cream O/W With Elastin

	%W/W
I Cutina CBS	12.0
Eumulgin B1	1.5
Eumulgin B2	1.5
Eutanol G	10.0
Cetiol 868	10.0
Avocado oil	3.0
II Henkel Glycerin 86% DAB 9	5.0
Water	47.0
III Elastin	10.0

Preparation: Heat phase I to 75C, stir in phase II heated to 80C. Add phase III to the cream at 40C. The pH is adjusted to 4.5-5.5 with citric acid, for example.

Formula No. A15-18

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Wash Cream

White thick lotion. Pleasant, soft feeling on the skin.

Material/CTFA-Index:

A: Teginacid/Glyceryl Stearate (and) Ceteareth-20	10.00%
Adol 66/Isostearyl Alcohol	5.00
Isopropyl Myristate	6.00
Eutanol G/Octyldodecanol	4.00
Texapon N 40/Sodium Laureth Sulfate	5.00
Mineral oil, high viscosity	5.00
B: Belsil DMC 6031/Dimethicone Copolyol	1.00
Propylene Glycol	11.00
Water	53.00
Preservatives, fragrances, pigments	q.s.

Heat A and B each to 65C. Mix B well into A.

Temperature stability: at 45C 8 weeks.

Formulation 362 AH

Cleansing Cream  
White firm cream.

Material/CTFA-Index:

A: Lanette N/Cetearyl Alcohol (and) Sodium Cetearyl Sulfate	12.00%
Vaseline/Petrolatum	9.00
Paraffin	2.00
Mineral oil, low viscosity	5.00
Isopropyl Myristate	2.00
B: Belsil DMC 6035/Methicone Copolyol Acetate	3.00
Glycerine	4.00
Water	63.00
Preservatives, fragrances, pigments	q.s.

Heat A and B each to 70C, mix B well into A.

Temperature stability: at 45C over 10 weeks.

Formulation 361 AH

SOURCE: Wacker Silicone: Suggested Formulations

Washing Cream

White firm cream. Good cleansing effect and soft feeling on the skin.

Material/CTFA-Index:

A: Lamecreme KSM/Glyceryl Stearate se	10.00%
Lanette O/Cetearyl Alcohol	5.00
Isopropyl Myristate	6.00
Belsil DM 350/Dimethicone	2.00
Eutanol G/Octyldodecanol	4.00
Texapon N 40/Sodium Laureth Sulfate	5.00
Mineral oil, low viscosity	5.00
B: Propylene Glycol	12.00
Water	46.50
Belsil DMC 6032/Dimethicone Copolyol Acetate	4.50
Preservatives, fragrances, pigments	q.s.

Heat A and B each to 65C, mix B into A, stir cold.

Temperature stability: at 45C over 10 weeks.

Formulation 397 AH

Day Cream

White firm cream with a silky shine. Absorbed well, leaves a dry feeling on the skin.

Material/CTFA-Index:

A: Stearic Acid	25.00%
Belsil PDM 20/Phenyl Dimethicone	5.00
B: Glycerine	8.00
Aminomethylpropanol	1.50
Water	60.50
Preservatives, perfume, pigments	q.s.

Heat A and B each to 75C. Stir A slowly into B. Stir cold.

Temperature stability: at 45C over 10 weeks.

Formulation 399 AH

Skin Cream

White, creamy, silky shine.

Material/CTFA-Index:

A: Belsil PDM 20/Phenyl Dimethicone	3.60%
Stearic Acid	4.20
Cetyl Alcohol	1.00
B: Glycerine	2.00
Triethanolamine	0.80
Wasser dest./Water	88.40
Preservatives, fragrances, pigments	q.s.

Heat A and B each to 80C, stir A into B.

Temperature stability: at 45C over 10 weeks.

Formulation 187/3 AH

SOURCE: Wacker Silicone: Suggested Formulations

Water In Oil Foundation Cream

	Wt%
(O) Liquid Paraffin (#70)	8.0
Squalane	15.1
Beeswax	8.0
Amiter LGOD	3.3
Amiter LGS-2	1.2
Amerchol H-9	1.7
Sorbitan Monooleate	0.6
Titanium Dioxide	7.0
Aluminum Monostearate	1.5
(W) Ajidew N-50	2.0
Propylene Glycol	5.0
Water	46.6
Preservative	q.s.

Procedure:

1. Suspend titanium dioxide and aluminum monostearate to the mixture of liquid paraffin and squalane.
  2. Add other (O) ingredients to the suspension.
  3. Heat (O) to 90-100C to dissolve.
  4. Heat (W) to 85C.
  5. Add (W) to (O) slowly with stirring.
  6. Cool to 40C with stirring.
- pH: 5.2

Vanishing Cream

	Wt%
(O) Stearic Acid	8.0
Liquid Paraffin (#70)	3.0
Isopropyl Myristate	3.0
Hydrogenated Lanolin	2.0
Nikkol WCB	2.0
Glyceryl Monostearate (Self Emulsifying Type)	1.3
Polyoxyethylene (20) Cetyl Ether	1.7
(W) Ajidew N-50	3.0
Propylene Glycol	3.0
Glycerin	3.0
Triethanolamine	0.5
Water	69.5
Preservative	q.s.

Procedure:

1. Heat (O) and (W) to 85-86C.
  2. Add (W) to (O) slowly with agitation.
  3. Cool slowly to 30C with stirring.
- pH: 7.2

SOURCE: Ajinomoto USA, Inc.: Suggested Formulations

**W/O-Cream**

### Recipe:

Ingredient	Percentage
A Hostacerin WO	10.00%
Polyglyceryl-2 Sesquiisostearate (and) Beeswax (and) Microcrystalline Wax (and) Mineral Oil (and) Magnesium Stearate (and) Aluminum Stearate	
Permulgin 3510	4.00%
Beeswax (and) Vaseline	
Shea Butter	2.00%
Mineral oil, low viscosity	7.00%
Isopropyl palmitate	7.00%
Walnut oil	4.00%
Antioxidant	q.s.
B Aquamollin BC pdr.h.c.	0.10%
Ethylendiamine Tetraacetic Acid-Sodium Salt	
Citric acid (10% in water)	0.25%
Glycerine	4.00%
Water	61.25%
Preservative	q.s.
C Perfume	0.40%

**Procedure:**

- I Melt A at 80C. II Heat B to 80C.  
III Stir II into I. IV Stir until cool.  
V At 35C add C to IV.  
Formula A VI/2717

**W/O-Cream**

### Recipe:

Ingredient	Weight %
A Hostacerin WO	8.00%
Polyglyceryl-2 Sesquiisostearate (and) Beeswax	
(and) Microcrystalline Wax (and) Mineral Oil	
(and) Magnesium Stearate (and) Aluminum Stearate	
Lunacera M	4.00%
Microcrystalline Wax	
Vaseline	4.00%
Mineral oil, high viscosity	10.00%
Isopropyl palmitate	8.00%
B Glycerine	4.00%
Water	61.60%
Preservative	q.s.
C Perfume	0.40%

**Procedure:**

- I Melt A at 80C. II Heat B to 80C.  
III Stir II into I. IV Stir until cool.  
V At 35C add C to IV.  
Formula A VI/2707

SOURCE: Hoechst: Guide Formulations for Cosmetics & Toiletries









W/O-CreamRecipe:

A	Hostacerin DGI	4.00%
	Polyglyceryl-2 Sesquiisostearate	
	Lunacera M	4.00%
	Microcrystalline Wax	
	Mineral oil, high viscosity	10.00%
	Cetiol SN	8.00%
	Cetearyl Isononanoate	
B	Gilugel IPP	8.00%
	Isopropyl Palmitate (and) Aluminum/Magnesium Hydroxide Stearate	
C	Water	65.60%
	Preservative	q.s.
D	Perfume	0.40%

Procedure:

I	Melt A at 80C.	II	Stir B into I (Ultra-Turrax).
III	Heat C to 80C.	IV	Stir III into II.
V	Stir until cool.	VI	At 35C add D to V.

Formula A VI/2805

All Round-CreamRecipe:

A	Hostacerin W0	10.00%
	Polyglyceryl-2 Sesquiisostearate (and) Beeswax	
	(and) Microcrystalline Wax (and) Mineral Oil	
	(and) Magnesium Stearate (and) Aluminum Stearate	
	Mineral oil, high viscosity	10.00%
	Isopropyl palmitate	10.00%
B	Water	69.60%
	Preservative	q.s.
C	Perfume	0.40%

Procedure:

I	Melt A at 80C.	II	Heat B to 80C.
III	Stir II into I.	IV	Stir until cool.
V	At 35C add C to IV		

Formula A VI/2703

SOURCE: Hoechst: Guide Formulations for Cosmetics &amp; Toiletries

W/O Cream with Eldew

<u>Ingredients/Trade Name:</u>	<u>% by Weight</u>
Part A:	
Di-(Cholesteryl, behenyl, octyldodecyl)	
N-Lauroyl-L-glutamic acid ester/Eldew CL-301	2.00
Cetearyl Octanoate	8.00
C12-15 Alkyl Benzoate	5.00
Phenoxyethanol	0.60
Tocopheryl Acetate	0.05
Part B:	
Polyglyceryl-4 Isostearate (and) Cetyl Dimethicone	
Copolyol (and) Hexyl Laurate	5.00
Cetyl Dimethicone	2.00
Part C:	
Deionized Water	68.55
Sodium Chloride	0.80
Glycerin (99.5%)	5.00
Partially Deacetylated Chitin (1.0%)/Marine Dew PC-100	2.00
Part D:	
Methylparaben	0.20
Butylene Glycol	0.80

Procedure:

Pre-melt Part A at 50 degrees Centigrade. Add Part B to Part A. Pre-melt Part D by heating to 50 degrees C. Add to Part C. Slowly add Part C and D mixture to Parts A and B with high shear mixing.

Appearance: White, smooth, shiny lotion.

pH: 6.00-6.50

Viscosity: 20,000 cps (RVT #6 @ 10rpm @ 25 degrees C)

Hand Cream

	<u>Wt%</u>
(O) Liquid Paraffin (#70)	10.0
Cetyl Alcohol	5.0
Nikkol WCB	5.0
Isopropyl Myristate	5.0
Glyceryl Monostearate (Self Emulsifying Type)	2.9
Polyoxyethylene (20) Cetyl Ether	2.1
(W) Ajidew N-50	3.0
Water	67.0
Preservative	q.s.

Procedure:

1. Heat (O) and (W) to 80C.
2. Add (W) to (O) slowly with stirring.
3. Cool to 40C with stirring.

pH: 5.2

SOURCE: Ajinomoto USA, Inc.: Suggested Formulations

## **Section VI**

# **Hair Care Products**

Aerosol Finishing Spray

<u>Ingredients:</u>	<u>% by Weight</u>
A. SD Alcohol 40, 200 proof	51.43
D-Panthenol 50P (Panthenol & Propylene Glycol)	1.00
AMP-95	1.47
Fragrance (Sunburst 94F/2197)	0.10
B. Luvimer 100P (Acrylates Copolymer)	6.00
C. Hydrofluorocarbon 152a	40.00
% VOC: 55%	

Procedure:

1. Combine phase A.
2. Sprinkle B into A and mix well.
3. Fill into appropriate containers with propellant.

Packaging:

White Coated Aluminum Can (Peerless Tube Corp.)  
Valve, Concave Kosmos Actuator & Overcap (Precision Valve Corp.)

Formulation PF-0338 suggested by BASF

Shaping Spray  
Hair Spray/Spray Gel

<u>Ingredients:</u>	<u>% by Weight</u>
A. SD Alcohol 40, 190 proof	84.20
Deionized water	7.63
D-Panthenol	0.50
Uvinul M40	0.10
AMP-95	1.47
Fragrance (Peach Floral 92F/3235)	0.10
B. Luvimer 100P (Acrylates Copolymer)	6.00

Procedure:

1. Combine ingredients in phase A in order listed.
2. Add phase B to A under mixing and mix until uniform.

Packaging:

White Coated Aluminum Can (Peerless Tube Corp.)  
AP4 1" Snap-On Pump & Overcap (Precision Valve Canada)

Formulation PF-0339 suggested by BASF

SOURCE: Angus Chemical Co.; Angus Product Formulary

**Aerosol Hair Spray**  
**Regular Hold**

<u>Ingredients:</u>	<u>% by Wt</u>
Advantage V Resin	5.00
AMP-95	0.15
SD Alcohol 40	42.50-57.50
Distilled Water	17.35
Plasticizer	q.s.
Fragrance, etc.	q.s.
Propellant (s)	20.00-35.00

**Aerosol Hair Spray**  
**Super Hold**

<u>Ingredients:</u>	<u>% by Wt</u>
Advantage V Resin	8.00
AMP-95	0.24
SD Alcohol 40	41.00-56.00
Distilled Water	15.768
Plasticizer	q.s.
Fragrance, etc.	q.s.
Propellant (s)	20.00-35.00

**Aerosol Hair Spray**  
**Maximum Hold**

<u>Ingredients:</u>	<u>% by Wt</u>
Advantage V Resin	11.00
AMP-95	0.34
SD Alcohol 40	39.50-54.50
Distilled Water	14.16
Plasticizer	q.s.
Fragrance, etc.	q.s.
Propellant (s)	20.00-35.00
Formulations PF-0264 suggested by ISP	

**Aerosol Hair Spray**  
**Regular Hold**

<u>Ingredients:</u>	<u>% by Wt</u>
Advantage CP Resin	5.00
AMP-95	0.08
Phenyl Trimethicone	0.15
Ethanol (200P)	59.77
Propellant A-46	35.00
Fragrance	q.s.

**Aerosol Hair Spray**  
**Super Hold**

<u>Ingredients:</u>	<u>% by Wt</u>
Advantage CP Resin	8.00
AMP-95	0.12
Phenyl Trimethicone	0.15
Ethanol (200P)	56.73
Propellant A-46	35.00
Fragrance	q.s.

Formulation PF-0266 suggested by ISP

SOURCE: Angus Chemical Co.: Angus Product Formulary

Aerosol Hair Spray Formulation Containing Water

<u>Ingredients:</u>	<u>% by Weight</u>
Luviflex VBM 35 (PVP/Acrylates Copolymer)	6.00
AMP-95 (Aminomethyl Propanol)	0.26
Ethanol, SDA 40	43.74
Distilled Water	20.00
Dymel A (Dimethyl Ether)	30.00

Procedure:

- Combine resin with AMP and ethanol.
- After a clear solution is obtained, slowly add the water.
- Mix well.
- Package and charge with propellant.

Formulation PF-0198 suggested by BASF

Aerosol Hair Spray Formulation Containing Water

<u>Ingredients:</u>	<u>% by Weight</u>
Ultraplast 8 (Acrylate/Acrylamide Copolymer)	3.00
AMP-95 (Aminomethyl Propanol)	0.25
Ethanol, SDA 40	46.75
Distilled Water	20.00
Dymel A (Dimethyl Ether)	30.00

Procedure:

- Combine resin with AMP and ethanol.
- After a clear solution is obtained, slowly add the water.
- Mix well.
- Package and charge with propellant.

Formulation PF-0199 suggested by BASF

Aerosol Hair Spray Formulation Containing Water

<u>Ingredients:</u>	<u>% by Weight</u>
Luviset CAP (Vinyl Acetate/Crotonic Acid/Vinyl Propionate Copolymer)	3.00
AMP-95 (Aminomethyl Propanol)	0.28
Ethanol, SDA 40	46.72
Distilled Water	20.00
Dymel A (Dimethyl Ether)	30.00

Procedure:

- Combine resin with AMP and ethanol.
- After a clear solution is obtained, slowly add the water.
- Mix well.
- Package and charge with propellant.

Formulation PF-0200 suggested by BASF

SOURCE: Angus Chemical Co.: Angus Product Formulary

**Aerosol Hairspray "100% VOC"-CMB Horizon System**

<u>Ingredients:</u>	<u>% by Weight</u>
Ethanol	91.67
AMP Regular	0.11
Advantage CP	8.00
Dimethicone Copolyol	0.10
Perfume, Kristine K/19718	0.12

**Procedure:**

Dissolve AMP neutralizer in ethanol. Add Advantage CP with stirring until uniform. Add remaining ingredients in order listed, mixing thoroughly after each addition. Charge into aerosol containers and pressurize using compressed gas (e.g. nitrogen) to 8 to 9 bar pressure.

Note: Containers should be checked for corrosion resistance to the product.

Formulation PF-0245E suggested by ISP

**Aerosol Hairspray, Hydrocarbon Propellant**

<u>Ingredients:</u>	<u>% by Weight</u>
Ethanol	60.82
AMP Regular	0.06
Advantage CP	4.00
Perfume, Kristine K/19718	0.12
Propane/butane	35.00

**Procedure:**

Dissolve AMP neutralizer in ethanol. Add Advantage CP with stirring until uniform. Add remaining ingredients in order listed, mixing thoroughly after each addition. Charge into aerosol containers and pressurize with propellant.

Formulation PF-0246E suggested by ISP

**Aerosol Hairspray**

<u>Ingredients:</u>	<u>% by Weight</u>
Ethanol	71.74
Water, Deionized	20.00
AMP Regular	0.16
Advantage CP	8.00
Dimethicone polyol	0.10
Sufadone LP-300	0.10
Perfume	q.s.

**Procedure:**

This hairspray uses the compressed gas-CMB Horizon system and meets the 80% VOC requirement. Dissolve AMP Regular in ethanol and water. Add Advantage with stirring, until uniform. Add remaining ingredients with stirring until uniform. Charge into aluminum containers and pressurize with nitrogen.

Formulation PF-0239E suggested by ISP

SOURCE: Angus Chemical Corp.: Angus Product Formulary

Aerosol Spray

Normal hold for all climatic zones, easy to comb and wash out.

<u>Ingredients:</u>	<u>% by Weight</u>
Ultrahold Strong	2.00
AMP Regular	0.25
Ethanol abs.	37.75
n-Pentane	20.00
DME	40.00
Perfume oil	q.s.

Procedure:

Place ethanol, AMP Regular and perfume oil in the stirrer vessel, add Ultrahold Strong. Stir until dissolved. Fill into containers.

Cloud point: Still clear at -35C

Pressure: 2.6 bar

Density: 0.6960

Formulation PF-0328 suggested by BASF

Aerosol Spray

Strong hold for all climatic zones, easy to comb and wash out.

<u>Ingredients:</u>	<u>% by Weight</u>
Ultrahold Strong	3.00
AMP Regular	0.35
Luviskol VA 37 E	6.00
Ethanol abs.	50.65
DME	40.00
Perfume oil	q.s.

Procedure:

Place ethanol, Luviskol VA 37 E, AMP Regular and perfume oil in the stirrer vessel, add Ultrahold Strong and stir until dissolved. Fill into containers.

Cloud point: Still clear at -35C

Pressure: 2.8 bar

Density: 0.7520

Formulation PF-0329 suggested by BASF

SOURCE: Angus Chemical Co.: Angus Product Formulary



Aerosol Spray

Strong hold for all climatic zones, easy to comb and wash out.

<u>Ingredients:</u>	<u>% by Weight</u>
Ultrahold Strong	4.00
AMP Regular	0.50
Ethanol abs.	40.50
Pentane	15.00
DME	40.00
Perfume oil	q.s.

**Procedure:**

Place ethanol, AMP Regular and perfume oil in the mixing vessel. Add Ultrahold Strong and stir until dissolved, then fill into containers.

Cloud point: Still clear at -35C

Pressure: 2.6 bar

Density: 0.7088

Formulation PF-0330 suggested by BASF

Aerosol Spray

Very strong hold for all climatic zones, easy to comb and wash out.

<u>Ingredients:</u>	<u>% by Weight</u>
Ultrahold Strong	6.00
AMP Regular	0.75
Ethanol abs.	43.25
Propane/butane	50.00
Perfume oil	q.s.

**Procedure:**

Place ethanol, AMP Regular and perfume oil in the mixing vessel, add Ultrahold Strong and stir until dissolved, then fill into containers.

Cloud point: Still clear at -35C

Pressure: 4.0 bar

Density: 0.6640

Formulation PF-0331 suggested by BASF

SOURCE: Angus Chemical Co.: Angus Product Formulary

Alcohol-Free Aerosol Hair Spray

<u>Ingredients</u>	<u>% by Weight</u>
Lovocryl 47	8.00
AMP-95	1.38
Deionized Water	57.62
Dimethyl Ether	33.00
Fragrance	q.s.
Preservative	q.s.

Cloud Point: -15C

Procedure:

Dissolve AMP-95 in water. While maintaining good agitation, slowly sift in Lovocryl 47. Mix until dissolved. Filter and fill, then charge with propellant.

Valve:

Seaquist Valve:	NS-34
Stem:	0.013"
Gasket:	Butyl 0.042" THK. Code: 501
Spring:	0.020" SS
Body:	Capillary
Cup:	Regular, Epoxy Top, Laminate Bottom, Dimpled, Code: 1610
Vapor Tap:	0.013"
Dip Tube:	0.040"
Actuator:	Excell 200 Misty 0.018 Misty

Formula PF-0268 suggested by National Starch & Chemical Co.

Shine and Hold Spray

<u>Ingredients:</u>	<u>% by Weight</u>
Amphomer	5.00
AMP Regular	0.82
Phenyl Trimethicone	5.00
Triethyl Citrate	0.10
Anhydrous Ethanol, SDA-40	89.08

Procedure:

Dissolve AMP in anhydrous ethanol, SDA-40. While maintaining good agitation, sift in Amphomer. When solution is complete, add Phenyl Trimethicone and Triethyl Citrate. Mix until homogeneous. Filter and fill.

Formulation PF-0269 suggested by National Starch & Chemical Co.

SOURCE: Angus Chemical Co.: Angus Product Formulary

Alcohol-Free Aerosol Hair Spray

<u>Ingredients/CTFA Designations:</u>	<u>% by Weight</u>
Amphomer LV-71/Octylacrylamide/Acrylates/Butylaminoethyl Methacrylate Copolymer	5.00
AMP-95/Aminomethyl Propanol	0.96
Burst RSD-10/Dimethicone Silylate	0.50
Deionized Water	60.54
DME/Dimethyl Ether	33.00
Preservative	q.s.

Valve:

Seaquist Valve:	NS-34
Stem:	0.013"
Stem Gasket:	Butyl, 0.042" THK. Code: 500
Spring:	SS 0.020"
Body:	Capillary
	Alum. C.C. AN.RG., Epoxy Top, Epoxy Bottom, Buna
Dip Tube:	0.040"
Vapor Tap:	0.013"
Actuator:	Excell 200 - 0.016" Misty

Can:

Advanced Monobloc Corp.

Procedure:

Disperse Burst in water. Dissolve AMP in solution. When complete, slowly sift in Amphomer LV-71 to the solution, while maintaining good agitation. Filter and fill concentrate. Charge cans with propellant.

Formulation PF-0258 suggested by National Starch & Chemical Co.

80% VOC Pump Hair Spray

<u>Ingredients:</u>	<u>% by Weight</u>
Ethanol (190 Proof)	79.63
Water	3.96
Gantrez XL-80 (PVM/MA Decadiene Crosspolymer)	5.70
AMP-95	0.41
Gantrez V-425 (Butyl Ester of PVM/MA Copolymer)	10.00
Phenyl Trimethicone	0.10
Fragrance	0.20

Procedure:

1. Add ethanol and water to main tank. Start mixing and add Gantrez XL-80. Mix until completely blended.
2. Add AMP-95 and mix until blended.
3. Add Gantrez V-425 and then additional ingredients while mixing completely after each addition.

Formulation PF-0257 suggested by ISP

SOURCE: Angus Chemical Co.: Angus Product Formulary

Alcohol-Free Styling Gel

<u>Ingredients:</u>	<u>% by Weight</u>
Part A:	
Deionized water	93.03
Octylacrylamide (and) acrylates (and) butylamino-ethyl methacrylate copolymer (Amphomer)	3.50
AMP-95	0.62
Part B:	
Propylene glycol	0.50
Cocamidopropyl PG-dimonium chloride (Monaquat P-TC)	0.40
Cocamidopropyl betaine (Varion CADG)	0.25
Lauramide DEA (Monamid 716)	0.20
Polysorbate 20	0.15
Quaternium-15	0.10

Part C:	
Hydroxyethylcellulose (Natrosol-250 HHX)	1.25
Fragrance	q.s.

Procedure:

Combine A. When complete, add B. When homogenous slowly sift in C with good agitation.  
Formulation PF-0253 suggested by National Starch and Chemical

Hair Setting Gel

Setting gel contains conditioning active ingredients for normal to dry hair.

<u>Ingredients:</u>	<u>% by Weight</u>
Part A:	
Ethanol, 96% denatured	15.00
PVP/VA copolymer (PVP/VA E-735)	4.00
Cetrimonium chloride (Dehyquart A)	0.50
Part B:	
Water	77.70
Carbomer 940 (Carbopol 940)	0.60
Color	0.20
AMP-95	0.30

Part C:	
Trideceth-9 (and) PEG-5 octanoate (NEO-PCL Water Soluble)	1.00
Trideceth-9 (and) PEG-40 Hydrogenated castor oil	0.50
Fragrance	0.20

Procedure:

Swell carbomer in water using an Ultraturrax stirrer. Blend A and C separately. Add A to C. Add AC to B using an Ultraturrax stirrer. Adjust pH to 6.2.  
Formulation PF-0254 suggested by Dragoco

SOURCE: Angus Chemical Co.: Angus Product Formulary

**Alcohol-Free Styling Mousse**

<u>Ingredients:</u>	<u>% by Weight</u>
Part A:	
Octylacrylamide/acrylates/butylaminoethyl methacrylate (Amphomer)	2.50
AMP-95	0.40
Amodimethicone (and) nonoxynol 10 (and) tallowtrimonium chloride	0.40
Octoxynol-9 (Triton Z-100)	0.30
Cocamidopropyl betaine (Varion CADG)	0.10
Quaternium-15	0.10
Deionized Water	48.90
Fragrance	q.s.
Part B:	
Hydroxyethyl cellulose (Natrosol 250 HHR)	0.30
Deionized Water	37.00
Part C:	
Isobutane/propane	10.00

**Procedure:**

Prepare A and B. When solutions are complete, add A to B; mix until homogeneous. Filter and fill concentrate. Charge with C

Formulation PF-0181 suggested by National Starch

**Setting Lotion**

Extra-strong hold, for all climatic zones, easy to comb and wash out.

<u>Ingredients:</u>	<u>% by Weight</u>
Ultrahold Strong	4.00
AMP-95	0.60
Ethanol, abs.	20.00
Water, distilled	75.40
Perfume oil	q.s.

**Procedure:**

Place ethanol, AMP-95, water and perfume oil in the mixing vessel, add Ultrahold Strong, stir until dissolved, then fill into containers.

Formulation PF-0336 suggested by BASF

SOURCE: Angus Chemical Co.: Angus Product Formulary

Aqua-Vital Moisturizing Spray (Pump Type)

	%W/W
A. Deionized Water	84.20
Cel-quat L200 (Polyquaternium-4)	0.20
Gel-Co (Gelatin)	1.00
Methylparaben	0.20
B. Propylene Glycol	6.00
Glycerin	1.00
Cationic Collagen Polypeptides	0.50
Aqua-Tein C (Collagen Amino Acids and Acetamide MEA)	2.00
Dowicil 200 (Quaternium-15)	0.20
Citric Acid, dry	0.40
Quat-Pro S (Steartrimonium Hydrolyzed Animal Protein)	0.20
C. Isopropyl Alcohol	4.00
Fragrance	0.10

**Procedure:**

Warm Phase A to bring all ingredients into solution. Add Phase B to Phase A. Pre-mix Phase C and add to Phase A/B at a temperature below 40C.

**Properties:**

A pump-type spray which moisturizes and protects the hair. Quats allow for easier combing. High molecular weight proteins impart a smooth, protective outer layer while the Amino Acids work from within. For best results, use a pump which delivers a fine mist.

Formula #HE-1607

Every Day Wave Gel Activator

	%W/W
Deionized Water	36.55
Carbopol 940 - 2% Aqueous Sol'n	25.00
Glycerin	20.00
Proto-Lan 30 (Propylene Glycol and PPG-12-PEG-65 Lanolin Oil and Hydrolyzed Collagen)	3.00
Dow Corning 193 Surfactant (Dimethicone Copolyol)	2.50
Panthenol	0.10
Propylene Glycol	10.00
DMDM Hydantoin	0.30
Solulan 98 (Polysorbate 80 and Cetyl Acetate and Acetylated Lanolin Alcohol)	2.00
Triethanolamine (TEA)	0.55

**Procedure:**

Mix all ingredients together except the TEA. Add TEA and mix carefully to avoid aeration.

**Properties:**

Softens and moisturizes to help return hair to a loose curl. The silicone serves to lubricate, add gloss and to "de-tack" the humectants. Good all-around formula for daily use.

Formula #HE-1608

SOURCE: Maybrook Inc.: Suggested Formulations

Birch Hair Tonic

	<u>%W/W</u>
Cetiol HE	2.0
Ethyl/isopropyl alcohol	30.0
Extrapon birch spec.	1.0
Perfume oil, water-soluble	1.0
Water	66.0
Formula No. WA51-01	

Hair Tonic, Oily

	<u>%W/W</u>
Cetiol HE	3.0
Dehyquart SP	0.4
Isopropyl alcohol	20.0
Eumulgin L	0.7
Water	75.9
Formula No. WA51-02	

Hair Tonic, Fat-Free

	<u>%W/W</u>
Dehyquart A	0.4
Isopropyl alcohol	20.0
Eumulgin L	1.0
Water	78.6
Formula No. WA51-03	

Hair Tonic, Fat-Free

	<u>%W/W</u>
Dehyquart SP	0.4
Isopropyl alcohol	20.0
Eumulgin L	0.7
Water	78.9
Formula No. WA51-04	

Hair Tonic for Greasy Hair

	<u>%W/W</u>
Ethanol 96%	30.0
Luviskol K30	0.5
1,2-propylene glycol	4.0
Lamacit ER	1.0
Nutrilan I	0.5
Lamepon PA-TR	1.0
Perfume	0.5
Water	62.5
Formula No. WA51-05	

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Bleaching Cream

	%W/W
I Emulgade F	30.0
Cetiol V or Eutanol G	5.0
II Water	57.0
III Ammonia 25%	8.0

Note: If used at a ratio of 1:1, the cream is mixed with diluted hydrogen peroxide and carbamide peroxide tablets dissolved in water. The hydrogen peroxide concentration can be between 3 and 10%. The German cosmetics legislation limits the use of ammonia to a maximum permissible concentration of 6% (calculated as NH<sub>3</sub>) and requires a declaration for concentrations from 2% upwards. The NH<sub>3</sub> content of this formulation is 2%.  
Formula No. UD11-01

Bleaching Emulsion

	%W/W
I Emulgade F	2.0
Cetiol V or Eutanol G	2.5
Wool fat, anhydrous	1.5
II Water	90.0
III Ammonia 25%	4.0

Note: The emulsion is stirred with concentrated hydrogen peroxide or carbamide peroxide tablets without the addition of water and so used.

The German cosmetics legislation limits the use of ammonia to a maximum permissible concentration of 6% (calculated as NH<sub>3</sub>) and requires a declaration for concentrations from 2% upwards.

The NH<sub>3</sub> content of this formulation is 1.0%.  
Formula No. UD21-01

Bleaching Oil, Gelatinizing

	%W/W
I Comperlan KD	39.0
Comperlan OD	35.0
Comperlan 100	5.0
Emulgade F spec.	5.0
II Isopropyl alcohol	10.0
III Ammonia 25%	6.0

Note: When used, the lotion is mixed with hydrogen peroxide (any percentage) at a ratio of 2:3. A transparent gel is obtained.

The German cosmetics legislation limits the use of ammonia to a maximum permissible concentration of 6% (calculated as NH<sub>3</sub>) and requires a declaration for concentrations from 2% upwards.

The NH<sub>3</sub> content of this formulation is 1.5%.  
Formula No. UD31-02

SOURCE: Henkel KGaA: Cosmetic Model Formulae



**Blow Drying Lotion**

	<b>%W/W</b>
Dehyquart SP	0.6
Ethyl/isopropyl alcohol	60.0
Water	39.4
Formula No. WD51-01	

**Blow Drying Lotion**

	<b>%W/W</b>
Dehyquart SP	0.6
Nasuna B *)	1.5
Ethyl/isopropyl alcohol	50.0
Water	47.9
Formula No. WD51-03	

**Blow Drying Lotion**

	<b>%W/W</b>
Dehyquart LT	0.4
Cetiol HE	1.5
Ethyl/isopropyl alcohol	50.0
Water	48.1
Formula No. WD51-05	

**Blow Drying Lotion**

	<b>%W/W</b>
Gafquat 734	2.0
Dehyquart SP	0.3
Eumulgin RO 40	0.2
Ethyl/isopropyl alcohol	47.5
Water	50.0
Formula No. WD51-08	

**Blow Drying Lotion, Clear**

	<b>%W/W</b>
Dehyquart A	0.4
Nasuna B *)	1.0
Eumulgin L	0.6
Isopropyl alcohol	20.0
Water	78.0
Formula No. WD51-10	

**Blow Drying Solution, Aerosol-Packed**

	<b>%W/W</b>
Nasuna B *)	2.0
Ethyl/isopropyl alcohol	30.0
Dehyquart SP	0.3
Water	67.7

Note: Filling: 40 parts solution  
 60 parts propellant 12/114 (40:60)  
 Formula No. WD71-01

Note: \*) The Nasuna types are not for sale in West Germany.  
 Various PVP/VA types on the market can be referred to.

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Bodifying Sculpting Lotion

This clear formula combines good holding power with conditioning, producing a bodyfying sculpting lotion which provides easy stylability. Hair acquires more body and a softer, silkier feel from the unique combination of bodying and styling properties which Crodacel QM imparts to this lotion - an effect of covalently bonding a fatty quaternary group to a cellulose backbone. Super Solan Flaked is used to plasticize the resin.

<u>Ingredients:</u>	<u>% by Weight</u>
A. SDA-40 Alcohol	40.00
Amphomer 28-4910	1.00
Super Solan Flaked	0.50
B. Crodacel QM	1.00
AMP-95	0.16
Deionized water	57.34

Procedure:

Dust the copolymer of Part A into the alcohol, mixing well until clear and then add Super Solan Flaked with mixing. Combine the ingredients of Part B with mixing and add to Part A, mixing until clear.

Formulation PF-0322 suggested by Croda Inc.

55% VOC Pump Hair Spray

<u>Ingredients:</u>	<u>% by Weight</u>
Water	6.80
Ethanol	80.00
AMP-95	0.56
Acudyne 255 (41% solids)	12.50
Dow Corning 190 Fluid	0.10

Procedure:

Mix water, ethanol, AMP-95 and plasticizer. Add polymer with stirring. Mix until solution is clear.

Properties:

Cloud Point: <-22F

Viscosity: 5 cps, spindle #1 @ 60 rpm

Formulation PF-0317 suggested by Rohm and Haas

SOURCE: Angus Chemical Co.: Angus Product Formulary

Brushing Gel

	Wt%
A. Amihope LL	0.5
POE (20) Sorbitan Monolaurate	0.5
POE (20) Sorbitan Monostearate	0.5
POE (25) Glyceryl Monopyroglutamate Monoisostearate	1.0
Propylene Glycol	2.0
Grape Seed Oil	0.5
B. Carboxyvinylpolymer (Carbopol 940) (1.0% wt% solution)	50.0
Deionized Water	balance
Preservatives	0.2
C. 10% wt. NaOH Solution	2.0

**Procedure:**

1. Weigh each ingredients (A) in glass vessel and mix.
2. Add (B) to the former mixture and heat to 70-80C with stirring.
3. After dissolution, cool down to room temperature. Then add (C) to the mixed solution and it turns to gel state.

**Note:**

This brushing gel reduces an electrostatic charge produced by combing and leads to smooth combing.

Hair Rinse

	Wt%
A. Cetanol	3.0
Amiter LGOD-2	5.0
Glyceryl Monostearate, Self Emulsifying (HLB 11)	2.0
Amihope LL	3.0
B. 1,3-Butylene Glycol	5.0
Stearyltrimethyl Ammonium Chloride	3.0
Methylparaben	0.2
Water	the rest

**Procedure:**

1. Dissolve (A) at 80C.
2. Dissolve (B) at 80C.
3. Add (B) to (A).
4. Mix them with a homomixer, and cool to 30C.

**Note:**

This creamy hair rinse has light finishing touch.

SOURCE: Ajinomoto USA, Inc.: Suggested Formulations

Brushing Lotion

	Wt%
A. Amihope LL	0.5
POE (20) Sorbitan Monolaurate	1.5
POE (25) Glyceryl Monopyroglutamate Monoisostearate	1.0
Propylene Glycol	2.0
B. Stearyl Alcohol	0.5
Carboxyvinylpolymer (Carbopol 941)	15.0
(0.5 wt% solution; neutralized by NaOH)	
Deionized Water	balance
Preservatives	0.2
C. ProdeW 100	0.2
Ethanol	5.0

Procedure:

1. Weigh each ingredient (A) in glass vessel and mix.
2. Add (B) to the former mixture and heat to 70-80C with stirring.
3. After dissolution, cool down to 50C. Then add (C) to the mixed solution.
4. With stirring, cool down to room temperature.

Note:

This brushing lotion reduces an electrostatic charge produced by combing and leads a smooth combing.

Hair Brushing Lotion

	Wt%
Amihope LL	1.0
POE (20) Sorbitan Monolaurate (Polysorbate 20)	1.0
Water	50.0
Ethanol	48.0

Procedure:

Mix all components at room temperature.

Note:

This hair brushing lotion has good antistatic effect and smoothness for the hair.

Amihope LL acts as hair conditioning agent instead of the cationic surfactant.

Usage:

Spray the hair before brushing.

SOURCE: Ajinomoto USA, Inc.: Suggested Formulations

**Cationic Thermal Styling Mousse**  
**(Nonaerosol - For Foamers)**

	<u>%W/W</u>
A. Supro-Tein V (Tea-Cocoyl Hydrolyzed Collagen (and) Sorbitol)	3.00
Kera-Tein 1000 AS (Ethyl Ester of Hydrolyzed Keratin)	3.00
Ameroxol OE-20 (Oleth-20)	0.25
Dimethicone Copolyol	0.25
Polyox WSR N-3000 (2% Aq. Soln.) (PEG-14M)	1.50
Cocoamphocarboxypropionate	1.00
Deionized Water	82.00
B. Amersette (Methacrylol Ethyl Betaine/Methacrylates Copolymer)	1.00
SD Alcohol 40, Anhydrous	8.00
Fragrance, Preservatives	q.s.

**Procedure:**

1. Heat the water in Phase A to 65C. Add the rest of Phase A to the water and mix until dissolved.
2. Dissolve the Amersette in the Alcohol at room temperature.
3. Slowly add Phase B to Phase A. Mix until homogeneous.

**Properties:**

This nonaerosol styling mousse utilizes Amersette and Kera-Tein 1000 AS as styling agents for long-lasting hold properties. The Kera-Tein 1000 AS, a substantive cationic protein, also adds a natural shine and protective properties.

Supro-Tein V enhances the quality of the mousse foam while conditioning the hair. Polyox WSR N-3000 enhances combing and shine characteristics.

Formula #HF-1406

**Firm Hold Cationic Hair Spray**

	<u>%W/W</u>
Alcohol SD-40A	75.00
Gantrez ES-225 (Ethyl Ester of PVM/MA Copolymer)	10.00
Dow Corning 190 Polyether (Dimethicone Copolyol)	0.10
Fragrance	0.10
Aminomethyl Propanol-95	0.18
Water	13.62
Pro-Tein ES-20 (Ethyl Ester of Hydrolyzed Collagen)	1.00

**Procedure:**

1. Add alcohol to mixing vessel.
2. Add the Gantrez to the Alcohol. Mix until dissolved.
3. Add the rest of the ingredients in the order listed, one at a time and mixing in between additions.

**Properties:**

An excellent hair spray for hard-to-hold hair. The Pro-Tein ES-20 and DC-190 plasticize the resin and improve shine and combing ability. Pro-Tein ES-20 is a cationic, substantive protein which gives the hair a natural look and feel.

Formula #HF-1400

**SOURCE:** Maybrook Inc.: Suggested Formulations

Cold Wave Cream

	%W/W
I Lanette O	16.00
Eumulgin 05	2.50
Eumulgin 010	2.50
Cetiol V or Eutanol G	5.00
II Water	42.55
Turpinal SL	0.20
III Ammonia 25%	18.75
IV Thioglycolic acid 80%	12.50

Note: The German cosmetics legislation limits the thioglycolic acid content in products for personal use to 8% and in products for commercial use to 11%. The pH must not exceed 9.5.

The pH of this formula is 7.5-9.5.

Because of the thioglycolic acid content in the formulas UA 11-01, -02 and UA 21-01 of approx. 10%, these cold wave preparations are only permissible for commercial use.

Preparation (valid for all cold wave emulsions): The fatty substances are melted at 70-80C. The water is also heated to 70-80C and stirred into the fat melt. The mixture is cooled to approx. 30C whilst stirring and the emulsion forms. Ammonia is carefully stirred in and then slowly neutralized with thioglycolic acid while being cooled.

Due to the risk of discoloration, contact with metal should be avoided.

Formula No. UA11-01

Hair Straightening Cream

	%W/W
I Lanette O	14.0
Eumulgin 05	2.0
Eumulgin 010	2.0
Comperlan KD	2.0
Cetiol V	2.0
II Turpinal SL	0.2
Borax	0.5
Water	47.9
III Ammonia (25%)	18.9
IV Thioglycolic Acid (95%)	10.5

Preparation: All the ingredients of I are weighed and melted at approx. 80C. The water, in which Turpinal SL and Borax have been dissolved, is also heated to 80-90C and stirred into the fat melt which is kept at 80-90C in a water bath. The mixture is then cooled to approx. 30C at which stage the emulsion is formed. Ammonia is carefully added while stirring and finally the thioglycolic acid is added while the mixture is being cooled and stirred.

The hair straightening cream has a pH of between 9 and 9.3.

Formula No. UA11-02

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Cold Wave Cream

	%W/W
I Lanette O	16.00
Eumulgin O5	2.50
Eumulgin O10	2.50
II Water	52.77
Turpinal SL	0.20
III Ammonia (25%)	15.50
IV Thioglycolic acid (95%)	10.53

Note: Cold wave cream for professional use.

Preparation: Melt I at 70-80C. Heat II to 70-80C and stir into I. Keep stirring until the mixture is cooled to under 30C (emulsification). Add thioglycolic acid, neutralize with ammonia/monoethanolamine while stirring and cooling, setting pH to 9.2.

Formula No. UA11-03

Cold Wave Emulsion

	%W/W
I Emulgade 1000 NI	5.00
II Water	68.77
Turpinal SL	0.20
III Ammonia (25%)	15.50
IV Thioglycolic acid (95%)	10.53

Preparation: Melt I at 70-80C. Heat II to 70-80C and stir into I. Keep stirring until the mixture is cooled to under 30C (emulsification). Add thioglycolic acid, neutralize with ammonia/monoethanolamine while stirring and cooling, setting pH to 9.2.

Note: Cold wave emulsion for professional use.

Formula No. UA21-01

Cold Wave Emulsion

	%W/W
I Emulgade 1000 NI	5.00
II Water	76.75
Turpinal SL	0.20
III Monoethanolamine (to pH 7)	4.90
Diisopropanolamine (to pH 9.2)	5.25
IV Thioglycolic acid (95%)	7.90

Preparation: Melt I at 70-80C. Heat II to 70-80C and stir into I. Keep stirring until the mixture is cooled to under 30C (emulsification). Add thioglycolic acid, neutralize with ammonia/monoethanolamine while stirring and cooling, setting pH to 9.2.

Note: Cold wave emulsion for general use.

Formula No. UA21-03

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Cold Wave Emulsion, Foaming

	%W/W
I Emulgate 1000 NI	2.0
Texapon MLS	2.0
II Water	76.6
Turpinal SL	0.2
III Ammonia (25%)	11.3
IV Thioglycolic acid (95%)	7.9

Note: Thioglycolic acid content approx. 7.5%. Cold wave emulsion for general use.

Preparation: Melt I at 70-80C. Heat II to 70-80C and stir into I. Keep stirring until the mixture is cooled to under 30C (emulsification). Add thioglycolic acid, neutralize with ammonia/monoethanolamine while stirring and cooling, setting pH to 9.2.

Formula No. UA21-04

Cold Wave Solution, Foaming, Clear

	%W/W
I Texapon MLS	3.0
Dehydol 100DEO	0.5
II Water	79.2
Turpinal SL	0.2
III Thioglycolic acid 95%	7.9
IV Monoethanolamine	9.2

Note: Thioglycolic acid content approx. 7.5%. Cold wave for general use.

Preparation: II is added to I, then thioglycolic acid is added. While stirring and cooling, neutralize with monoethanolamine, setting pH to 9.2.

Formula No. UA61-01

Cold Wave Solution, Clear, Foaming

	%W/W
I Texapon MLS	3.0
Dehydol 100 DEO	0.5
II Viscontran HEC 30 000 PR (29% aqueous solution)	10.0
III Water	69.2
Turpinal SL	0.2
IV Thioglycolic acid 95%	7.9
V Monoethanolamine	9.2

Note: Thioglycolic acid content 7.5%. Cold wave solution for general use.

Preparation: I is added to III then II is stirred in. Add thioglycolic acid and while stirring and cooling neutralize with monoethanolamine, setting pH to 9.2.

Formula No. UA61-03

SOURCE: Henkel KGaA: Cosmetic Model Formulae



Cold Wave Fixative, Foaming

	%W/W
I Emulgate F	5.0
Water	40.0
II Sodium bromate	10.0
Water	40.0
III Texapon N40	5.0

Note: When using the formula, dilute 1:1 with water.

Preparation: Melt Emulgate F. Stir in the water heated to 80C.

After cooling, add phase II as a solution, then stir in Texapon N40.

Formula No. UB21-01

Cold Wave Fixative, Foaming, In Emulsion Form

	%W/W
I Emulgate F spec.	1.0
II Water	82.6
Citric acid	1.2
Turpinal SL	0.2
III Texapon N25/N40	5.0
IV Hydrogen peroxide 30%	10.0

Set pH to approx. 4.5 with citric acid or Turpinal SL.

Note: When using the formula, dilute 1:1 with water.

Preparation: Melt Emulgate F. Stir in the hot water in which the citric acid was dissolved. After cooling, add first Texapon N25 and then H2O2.

German cosmetics legislation limits the H2O2 content to 12% and requires the declaration "Contains 3% H2O2".

Formula No. UD21-03

Cold Wave Fixative in Emulsion Form

	%W/W
I Emulgate F spec.	5.0
Eumulgin B1	0.5
II Dehyquart A	5.0
Water	81.3
Turpinal SL	0.2
III Hydrogen peroxide (30%)	8.0

Preparation: Melt phase I, stir phase II (approx. 80C) into phase I. Allow to cool, stirring continuously, then add phase III.

Formula No. UB21-05

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Cold Wave Fixative, Foaming

	%W/W
Texapon N40	15.0
Citric acid	0.5
Water	79.0
Hydrogen peroxide 30%	5.0
Sodium pyrophosphate, acidic	0.5
Note: Use in undiluted form.	
Declaration: "Contains 1.5% H <sub>2</sub> O <sub>2</sub> "	

Cold Wave Fixative with Bromate

	%W/W
Olaamin K	10.0
Sodium bromate	5.0
Potassium bromate	2.0
Lamesoft 156	2.0
Water	78.7
Carbopol 940	1.0
Triethanolamine	1.3
Preparation: Stir together Olaamin K with sodium bromate, potassium and Lamesoft 156 until the sodium bromate and potassium bromate fully dissolved. Then disperse Carbopol 940 (sprinkle in through a sieve), stirring well and neutralize with triethanolamine (pH 7).	
Formula No. U61-03	

Cold Wave Fixative, Foam, Aerosol-Packed

	%W/W
Texapon A	15.0
Water	81.0
Potassium bromate	4.0
Note: Desired pH: 4.0-4.5	
Filling: 92 parts product	
8 parts propellant 12:114 (40:60)	
Special spray nozzle necessary.	
Formula No. UB71-01	

Base for Hair Dye Creams

	%W/W
I Lanette N or SX, Emulgade F or F spec.	15.0
Cetiol V or Eutanol G, paraffin oil or vegetable oil	10.0
Beeswax or Cutina CP, wool fat or wool fat alcohols, refined	5.0
II Water	70.0
Formula No. UC 11-01	

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Conditioner

White, high viscosity

Material/CTFA-Index:

Tylose H 4000 P/Hydroxyethylcellulose	1.80%
Water	91.20
Cetyl Alcohol	2.00
Belsil ADM 6057 E/Amodimethicone (and) Tallowtrimonium Chloride (and) Nonoxyno1-10	5.00
Preservatives, fragrances	q.s.

Mix Tylose H 4000 P into the water and whilst stirring bring to a temperature of 70C. Melt the cetyl alcohol and stir into the clear Tylose slime. Cool and add Belsil ADM 6057 E.

Temperature stability: at 45C over 10 weeks.

Formulation 231 AH

Conditioner

Creamy, easy to comb, reduces drying time.

Material/CTFA-Index:

Belsil CM 040/Cyclomethicone	5.00%
Lamecreme KSM/Glyceryl Stearate se	3.00
Cetyl Alcohol	1.00
Water	91.00
Preservatives, fragrances	q.s.

Heat Lamecreme KSM and the cetyl alcohol to 70C, work in the water stirring well. Leave to cool somewhat, mix in Belsil CM 040.

Temperature stability: at 45C over 10 weeks.

Formulation 311 AH

Conditioner

Slightly cloudy, high viscosity.

Material/CTFA-Index:

A: Water	94.50%
Tylose H 4000 P/Hydroxyethylcellulose	1.00
B: Belsil DMC 6035/Methicone Copolyol Acetate	2.00
Belsil ADM 6042 E/Amodimethicone (and) Emulsifier	2.50
Preservatives, fragrances, pigments	q.s.

Mix A well, mix in B.

Formulation 550 AH

SOURCE: Wacker Silicone: Suggested Formulations

Conditioner

Creamy soft. Produces a good shine and makes hair easy to comb

Material/CTFA-Index:

Water	90.30%
Ethylenglykol/Glycol	3.20
Lanette N/Cetearyl Alcohol (and) Sodium Cetearyl Sulfate	3.50

Belsil ADM 6056 E/Dimethicone (and) Amodimethicone (and)  
Nonoxynol-4 (and) Nonoxynol-14 2.50

Belsil DM 100000/Dimethicone 0.50

Preservatives, Fragrances q.s.

Heat the glycol to 70C, dissolve Lanette N in it. Stir in  
70C hot water, mix in Belsil ADM 6056 E and Belsil DM 100 000.  
Formulation 577 AH

Hair Gel

Translucent gel. Good hold, wet look.

Material/CTFA-Index:

Water	59.50%
Carbopol 934/Carbomer 934	0.50
Triethanolamine	1.20
Glycerine	34.20
Propylene Glycol	2.00
Belsil DMC 6035/Methicone Copolyol Acetate	2.30
Preservatives, fragrances	q.s.

Mix the Carbomer 934 well into the water. Mix in the others  
homogeneously.

Temperature stability: at 45C over 10 weeks.

Formulation 353 AH

Hair Fixative

For dry hair with slight hold.

Material/CTFA-Index:

Luviskol VA 64/PVP/VA Copolymer	1.50%
Ethanol/Alcohol	30.00
Water	65.00
Genamin CTAC/Cetrimoniumchlorid	0.10
Propylene Glycol	0.30
Wacker-Belsil DMC 6031/Dimethicone Copolyol	1.00

Preservative, Fragrances, Pigments q.s.

Dissolve Luviskol VA 64 in Alcohol then add the remaining  
ingredients.

Formulation 819 AH

SOURCE: Wacker Silicone: Suggested Formulations

Conditioner

<u>A</u>	Deionized Water	79.39%
	PVP (PVP K-30)	0.50
	Cetylpyridinium Chloride	1.00
	Pecosil SWPQ-40 (Hydrolyzed Wheat Protein/ DCP Copolymer, Quaternary)	2.00
<u>B</u>	Methylparaben	0.25
	Propylene Glycol	5.00
	Disodium EDTA	0.10
<u>C</u>	Cetyl Alcohol	1.25
	Stearyl Alcohol	1.25
	Lanolin	0.50
	Mineral Oil (Kaydol)	7.75
	Propylparaben	0.15
	Meadowfoam Seed Oil	0.50
<u>D</u>	Tocopheryl Acetate	0.01
	DMDM Hydantoin	0.35

Procedure:

Add PVP K-30 to phase A water, propeller mix until uniform. Add Cetylpyridinium Chloride and Pecosil SWP-83 to the rest of phase A and propeller agitate until uniform. Heat phase A to 72C and then add phase B to phase A. Heat phase C to 75C. When both phase AB and phase C are uniform and at temperature, add phase C to phase AB with propeller agitation. Cool ABC to 50C while continuing propeller agitation. Then add phase D to ABC, continue agitation while cooling ABCD to 35C.  
Formula 14-60-A

Styling Gel

<u>A</u>	Deionized Water	50.00%
	Carbomer 940	0.50
	Triethanolamine (99%)	0.63
<u>B</u>	Deionized Water	42.97
	PVP (PVP K-30)	1.00
	Polyquaternium-11 (Gafquat 755)	4.00
	Pecosil SWP-83 (Hydrolyzed Wheat Protein/Dimethicone Copolyol Phosphate Copolymer)	0.50
	Panthenol	0.25
	Quaternium-15	0.10
	DMDM Hydantoin	0.05

Procedure:

Disperse Carbomer in phase A water with adequate agitation. When Carbomer is uniformly dispersed, add Triethanolamine under slow sweep agitation. With adequate agitation, add PVP to phase B water. When PVP is completely dissolved, Add remaining phase B items. When phase B is uniform, add phase B to phase A under slow sweep agitation.  
Formula 14-61-A

SOURCE: Phoenix Chemical, Inc.: Suggested Formulations

**Conditioning Protein Hair Gel**

<u>Ingredients:</u>	<u>Weight%</u>	<u>Function</u>
Deionized Water	98.0	Diluent
Carbopol 940	0.5	Gelling Agent
Triethanolamine	0.5	Neutralizer
Soluble Keratin	0.5	Protein
DMDM Hydantoin	0.3	Preservative
Benzophenone 4	0.1	UV Stabilizer
Fragrance	q.s.	
Color	q.s.	

**Procedure:**

1. Slowly sift Carbopol 940 resin into rapidly deionized water.
2. Reduce the agitation with sweep blade. Add triethanolamine, keratin, preservative, benzophenone, and EDTA. Mix until homogeneous.

Formula C0028

**Hair Setting Gel**

<u>Ingredients</u>	<u>Weight%</u>	<u>Function</u>
Carbopol 940	0.6	Gelling Agent
Water (Deionized)	80.0	Diluent
PVP/VA Copolymer	1.0	Hair Setting Resin
Triethanolamine (99%)	1.4	Neutralizing Agent
Water (Deionized)	16.1	Diluent
DMDM Hydantoin	0.3	Preservative
Disodium EDTA	0.1	Chelating Agent
Oleth-20	0.5	Lubricant/Fragrance Stabilizer

**Procedure:**

1. Slowly sift Carbopol 940 into the vortex of rapidly agitating water. When resin is dispersed, reduce agitation and mix until a homogeneous dispersion is obtained.
2. Separately combine copolymer, triethanolamine, water, preservative, and disodium EDTA until dissolved.
3. Add to Carbopol dispersion with moderate sweeping agitation.
4. Heat Oleth-20 to liquid. Add to gel with slow mixing.

Formula C0029

SOURCE: BF Goodrich Co.: Suggested Formulations

Conditioning Rinse Aerosol-Packed, Remains on Hair

	%W/W
I Lanette 18	2.0
Cetiol HE	1.0
II Henkel Glycerin 86% DAB 9	1.0
Dehyquart SP	0.5
Water	95.5

Preparation: Melt I at 70-80C. Heat II to 70-80C and stir into I. Preserving and perfuming are carried out under 40C. The pH is adjusted to approx. 5 with phosphoric acid.

Filling: 90 parts active ingredient  
10 parts propellant (Frigen 12)  
Vertical valve and foam nozzle

Formula No. VB71-06

Conditioning Rinse, Aerosol-Packed

	%W/W
I Lanette 16	2.0
Cetiol HE	1.0
II Henkel Glycerin 86% DAB 9	1.0
Dehyquart SP	0.5
Water	55.5
III Ethanol	40.0

Preparation: I is melted at 75-80C. II is heated to 70-80C and stirred into I. After cooling to under 35C ethanol and perfume oil are added and the pH is adjusted to approx. 5 with phosphoric acid.

Filling: 90 parts active ingredient  
10 parts propellant (Frigen 12)

Valve: Vertical valve and foam nozzle

Formula No. VB71-07

Hair Conditioner, Aerosol-Packed

	%W/W
I Emulgade F special	4.0
Eutanol G	6.0
II Dehyquart A	4.0
Water (70-80C)	30.0
III Cosmedia Guar C261	0.5
Henkel Glycerin 86% DAB9	5.0
Water (70-80C)	50.5

Preparation: The melted phase I is stirred into phase II until homogeneous. The Cosmedia Guar C261 is made into a paste with glycerine and stirred into the hot water. The two cooled phases are stirred together until homogeneous and the pH is adjusted to 4-5 with phosphoric acid.

Filling: Aerosol cans with vertical valves and foam nozzles are filled (minus 30% safety volume) with:

92% active ingredient solution and  
8% propellant, e.g. propane/butane 3.5 bar

Formula No. VB71-08

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Conditioning Setting Lotion, Clear

	%W/W
Nasuna B *)	3.0
Dehyquart SP	0.6
Cetiol HE	1.0
Water	95.4
Formula No. WB51-07	

Conditioning Setting Lotion, Clear

	%W/W
Dehyquart SP	0.6
Luviskol VA 64	2.0
Citric acid	0.3
Water	97.1
Formula No. WB51-09	

Conditioning Setting Lotion, Clear

	%W/W
Dehyquart A	0.5
Luviskol VA 64	2.0
Water	97.5
Formula No. WB51-10	

Conditioning Setting Lotion, Cloudy

	%W/W
Nasuna B *)	3.0
Dehyquart SP	0.6
Antara 430	0.1
Water	96.3
Formula No. WB51-12	

Setting Lotion, Clear, Oily

	%W/W
Nasuna B *)	2.0
Eumulgin L	1.2
Cetiol HE	1.0
Dehyquart SP	0.6
Isopropyl alcohol	20.0
Water	75.2
Formula WB51-14	

Preparation: Nasuna B is dissolved in alcohol, water is added and Carbopol 940 is then stirred in. When Carbopol 940 is uniformly dispersed, the solution is neutralized with triethanolamine and then perfumed.

Note: \*) The Nasuna types are not for sale in West Germany. Various PVP/VA types on the market can be referred to.

SOURCE: Henkel KGaA: Cosmetic Model Formulae



**Cream-Rinse****Recipe:**

A	Genamin KDM-F	3.75%
	Behentrimonium Chloride	
	Cetyl alcohol	3.00%
B	Water	92.75%
	Preservative	q.s.
C	Perfume	0.30%
	Dyestuff solution	q.s.
D	Citric acid -->pH 4.0	q.s.

**Procedure:**

- I Melt A and B together at 75C.  
 II Stir until 35C, then add the components of C.  
 III Finally adjust the pH with D.  
 Formula B II/1023

**Cream-Rinse****Recipe:**

A	Genamin KDM-F	1.50%
	Behentrimonium Chloride	
	Genapol L-3	2.00%
	Laureth-3	
	Cetyl alcohol	2.50%
	Jojoba oil	1.00%
B	Water	92.70%
	Preservative	q.s.
C	Perfume	0.30%
	Dyestuff solution	q.s.
D	Citric acid -->pH 4.0	q.s.

**Procedure:**

- I Melt A at 75C.  
 II Heat B to 75C.  
 III Stir II into I.  
 IV Stir until cool.  
 V At 35C add the components of C to IV.  
 VI Finally adjust the pH with D.  
 Formula B II/1060

**SOURCE:** Hoechst: Guide Formulations for Cosmetics & Toiletries

Cream-RinseRecipe:

A	Genamin KDM-F	2.00%
	Behentrimonium Chloride	
	Hostaphat KL 340 N	1.50%
	Trilaureth-4 Phosphate	
	Cetyl alcohol	2.00%
	Mineral oil, high viscosity	2.00%
B	Water	92.20%
	Preservative	q.s.
C	Perfume	0.30%
	Dyestuff solution	q.s.
D	Citric acid -->pH 4.0	q.s.

Procedure:

- I Melt A at 75C.
  - II Heat B to 75C.
  - III Stir II into I.
  - IV Stir until cool.
  - V At 35C add the components of C to IV.
  - VI Finally adjust the pH with D.
- Formula B II/1055

Cream-RinseRecipe:

A	Genamin KDM-F	2.50%
	Behentrimonium Chloride	
	Hostaphat KL 340 N	1.50%
	Trilaureth-4 Phosphate	
	Cetyl stearyl alcohol	3.00%
	Mineral oil, high viscosity	1.00%
B	Water	89.20%
	Genamin KSL	2.50%
	PEG-5 Stearyl Ammonium Lactate	
	Preservative	q.s.
C	Perfume	0.30%
	Dyestuff solution	q.s.
D	Citric acid-->pH 4.0	q.s.

Procedure:

- I Melt A at 75C.
  - II Heat B to 75C.
  - III Stir II into I.
  - IV Stir until cool.
  - V At 35C add the components of C to IV.
  - VI Finally adjust the pH with D.
- Formula B II/1054

SOURCE: Hoechst: Guide Formulations for Cosmetics & Toiletries

### Cream-Rinse

### Recipe:

A	Genamin DSAC	1.50%
	Distearyldimonium Chloride	
	Hostacerin DGS	1.50%
	Polyglyceryl-2 PEG-4 Stearate	
	Cetyl alcohol	2.00%
	Mineral oil, high viscosity	1.00%
B	Genamin CTAC	2.00%
	Cetrimonium Chloride	
	Water	91.70%
	Preservative	q.s.
C	Perfume	0.30%
	Dyestuff solution	q.s.
D	Citric acid-->pH 4.0	q.s.

**Procedure:**

- I Melt A at 75C. II Heat B to 75C.  
III Stir II into I. IV Stir until cool.  
V At 35C add the components of C to IV.  
VI Finally adjust the pH with D.  
Formula B.II/1052

### Cream-Rinse

Recipe:

A	Genamin DSAC	1.50%
	Distearyldimonium Chloride	
	Hostacerin T-3	1.50%
	Ceteareth-3	
	Cetyl alcohol	2.50%
	Mineral oil, high viscosity	1.00%
B	Genamin KSL	2.00%
	PEG-5 Stearyl Ammonium Lactate	
	Water	91.20%
	Preservative	q.s.
C	Perfume	0.30%
	Dyestuff solution	q.s.
D	Citric acid-->pH 4.0	q.s.

**Procedure:**

- I Melt A at 75C. II Heat B to 75C.  
III Stir II into I. IV Stir until cool.  
V At 35C add the components of C to IV.  
VI Finally adjust the pH with D.  
Formula B II/1051

SOURCE: Hoechst: Guide Formulations for Cosmetics & Toiletries

**Curl Activator**  
(Formula 82-1010)

	<u>% By Weight</u>
<b><u>Oil Phase:</u></b>	
Alkamuls GMS	3.0
Cetyl Stearyl Alcohol	2.0
Petrolatum (Penreco)	2.0
Drakeol 10 (Penreco)	6.5
Sesame Oil	0.1
<b><u>Water Phase:</u></b>	
Cellosize QP	0.5
Propylene Glycol	5.0
Glycerine	4.0
Alkamuls GMS	3.5
Solulan 75 (Amerchol)	0.5
Preservative	Q.S.
Water	72.9
Fragrance, Dye	Q.S.

**Blending Procedure:**

Charge water into mixing vessel and while warming to 75C, lightly blend in Cellosize QP. Once Cellosize QP is completely dispersed, blend in remaining water phase ingredients in order listed. In a separate container, prepare oil phase and gently warm to 75C. With rapid but smooth agitation, slowly add oil phase to water phase. Once system is uniform, cool with moderate agitation to 40-45C and blend in dye and fragrance.

**Use Directions:** Lightly coat hair with a small amount of activator. Work into hair with fingers. Brush and style.

**Wave Lotion (Buffered)**  
(Formula 92-1209)

	<u>% by Weight</u>
<b>A.</b>	
Miranol DM	8.0
Arlacel 165	3.5
Cetyl Alcohol	1.0
Stearyl Alcohol	0.5
<b>B.</b>	
Ammonium thioglycolate 100%	10.0
Ammonium hydroxide 25%	3.0
Ammonium dithioglycolic acid	5.0
Deionized water	q.s to 100
Ammonium Xylene Sulfonate	2.0

**Procedure:**

Heat "A" to 75C with agitation. Add "B" to "A". Continue agitation until uniform.

**SOURCE:** Rhone-Poulenc Surfactants & Specialties: Formulas

**Economy Creme Rinse Conditioner**  
(Formula 86-0902M)

Miracare SCS is a flaked conditioner concentrate specially developed to produce luxurious creme rinse products. A unique blend of emollients and conditioning agents, Miracare SCS readily disperses in 75-80°C water to form elegant hair care products.

	<u>% By Weight</u>
Miracare SCS	5.0
Sodium Chloride	0.2
Citric Acid	0.3
Fragrance, Dye, Preservative	Q.S.
Water	94.5

Blending Procedure: Dissolve Sodium Chloride and Citric Acid in water and then heat to 75-80°C. With smooth agitation, slowly blend Miracare SCS into heated water system. Mix until completely uniform. With smooth agitation cool system to 40°C and add compatible Fragrance, Dye(s), and Preservative.

Typical Formulation Properties

Appearance After 24 Hrs:	Viscous, Opaque Lotion
pH (10% Aq.):	2.5-3.5
% Non Volatiles:	5-7

CTFA Identification: Water, Cetearyl Alcohol, PEG-40 Castor Oil, Stearalkonium Chloride, Citric Acid, Sodium Chloride, Fragrance, Preservative, Dye(s).

**"Light" Creme Rinse Conditioner**  
(Formula 88-0806)

	<u>% By Weight</u>
Rhodaquat M242B/99	0.80
Cetyl Alcohol NF	4.00
Citric Acid	0.20
Fragrance, Dye(s), Preservative	Q.S.
Water	95.00

Blending Procedure: Dissolve Citric Acid in water and heat to 70-75°C. With smooth agitation, slowly blend in Rhodaquat M242B/99 followed by Cetyl Alcohol NF. Mix until completely uniform. With smooth agitation, cool system to 40-45°C and blend in compatible Fragrance, Dye(s), and Preservative.

Typical Formulation Properties

Appearance After 24 Hours:	Viscous, Opaque Lotion
pH:	2.2-3.2
Viscosity After 24 Hours (25°C):	5,000-8,000 cps (No. 4 Spindle @ 10 RPM)

CTFA Identification: Water, Cetyl Alcohol, Cetrimonium Bromide, Citric Acid, Fragrance, Preservative, Dye(s).

SOURCE: Rhone-Poulenc Surfactants & Specialties: Formulas

**Extra-Firm Holding Hairspray**

Extra strong hold, for all climatic zones, easy combability, good brush-out, good wash-out properties.

<u>Ingredients:</u>	<u>% by Weight</u>
Luvimer 100 P	5.00
AMP Regular	1.16
Ethanol	33.84
Dimethyl ether	60.00
Perfume	q.s.

**Procedure:**

Combine ethanol, AMP and perfume. Add Luvimer 100 P to the solution and mix until clear.

Cloud point: -35C  
 Pressure: 4.2 bar  
 Density: 0.74 g/cm<sup>3</sup>

Formulation PF-0289 suggested by BASF

**Firm Holding Hairspray**

Strong hold, for all climatic zones, easy combability, good brush-out, good wash-out properties.

<u>Ingredients:</u>	<u>% by Weight</u>
Luvimer 100 P	3.00
AMP Regular	0.69
Ethanol	46.31
Propane/Butane	50.00
Perfume	q.s.

**Procedure:**

Combine ethanol, AMP and perfume. Add Luvimer 100 P to the solution and mix until clear.

Cloud point: -35C  
 Pressure: 4.0 bar  
 Density: 0.67 g/cm<sup>3</sup>

Formulation PF-0290 suggested by BASF

SOURCE: Angus Chemical Co.: Angus Product Formulary

**Extra Firm Holding Hairspray**

Extra strong hold, for all climatic zones, easy combability, good brush-out, good wash-out properties.

<u>Ingredients:</u>	<u>% by Weight</u>
Luvimer 100 P	5.00
AMP Regular	1.16
Ethanol	43.84
Propane/Butane	50.00
Perfume	q.s.

**Procedure:**

Combine ethanol, AMP and perfume. Add Luvimer 100 P to the solution and mix until clear.

Cloud point: -35C

Pressure: 4.0 bar

Density: 0.68 g/cm<sup>3</sup>

Formulation PF-0291 suggested by BASF

**80% VOC Hairspray**

Strong hold, for all climatic zones, easy combability, good brush-out, good wash-out properties.

<u>Ingredients:</u>	<u>% by Weight</u>
Luvimer 100 P	5.00
AMP-95	1.16
Water	13.84
Ethanol	40.00
Dimethyl ether	40.00
Perfume	q.s.

**Procedure:**

Combine ethanol, AMP-95 and perfume. Add Luvimer 100 P to the solution and mix until clear. Add water and mix thoroughly.

Cloud point: -35C

Pressure: 43.2 bar

Density: 0.81 g/cm<sup>3</sup>

Formulation PF-0292 suggested by BASF

SOURCE: Angus Chemical Co.: Angus Product Formulary

Firm Holding Hairspray

Strong hold, for all climatic zones, easy combability, good brush-out, good wash-out properties.

<u>Ingredients:</u>	<u>% by Weight</u>
Luvimer 100 P	1.00
AMP-95	0.23
Luviskol VA 37 I	8.00
Water	5.50
Ethanol	22.77
Dimethyl ether	62.50
Perfume	q.s.

Procedure:

Combine ethanol, AMP-95 and perfume. Add Luvimer 100 P and Luviskol VA 37 I to the solution and mix until clear, add water and mix thoroughly.

Cloud point: -35C  
 Pressure: 4.7 bar  
 Density: 0.75 g/cm<sup>3</sup>

Formulation PF-0293 suggested by BASF

Hairspray

Strong hold, for all climatic zones, easy combability, good brush-out, good wash-out properties.

<u>Ingredients:</u>	<u>% by Weight</u>
Luvimer 100 P	0.60
AMP Regular	0.14
Luviskol VA 37 E	4.80
Ethanol	54.46
Dimethyl ether	40.00
Perfume	q.s.

Procedure:

Combine ethanol, AMP and perfume. Add Luvimer 100 P and Luviskol VA 37 E to the solution and mix until clear.

Cloud point: -35C  
 Pressure: 3.2 bar  
 Density: 0.77 g/cm<sup>3</sup>

Formulation PF-0294 suggested by BASF

SOURCE: Angus Chemical Co.: Angus Product Formulary



Firm Holding Luster Spritz

<u>Ingredients:</u>	<u>% by Weight</u>
Stepanhold Extra	15.00
AMP Regular	0.38
Cyclomethicone	0.30
Panthenol	0.45
SDA-40A Alcohol	83.84
Fragrance	q.s.

Procedure:

Charge alcohol to mixing vessel. With moderate agitation, add AMP and mix well. Add Stepanhold Extra and mix until thoroughly dissolved. Add Cyclomethicone, mixing thoroughly. Add Panthenol and mix well until dissolved. Add desired fragrance and mix well.

Formulation PF-0159 suggested by Stepan Co.

Conditioning Firm Hold Hair Spray

<u>Ingredients:</u>	<u>% by Weight</u>
Stepanhold Extra	13.75
AMP Regular	0.35
Ammonyx KP	0.50
Methyl Gluceth-20	0.25
SDA-40A Alcohol	85.15
Fragrance	q.s.

Procedure:

Charge alcohol to mixing vessel. With moderate agitation, add AMP and mix well. Add Stepanhold Extra and mix until completely dissolved. Add Ammonyx KP and mix thoroughly. Add methyl gluceth-20 and mix until completely dissolved. Add desired fragrance and mix well.

Formulation PF-0160 suggested by Stepan Co.

Medium Hold Sheen Spray

<u>Ingredients:</u>	<u>% by Weight</u>
Stepanhold Extra	11.25
AMP Regular	0.29
Dimethicone Copolyol Surfactant	0.25
PEG-75 Lanolin	0.15
SDA-40A Alcohol	88.04
Fragrance	q.s.

Procedure:

Charge alcohol to mixing vessel. With moderate agitation, add AMP and mix well. Add Stepanhold Extra and mix until completely dissolved. Add dimethicone copolyol and mix thoroughly. Add PEG-75 lanolin and mix until dissolved. Add desired fragrance and mix well.

Formulation PF-0161 suggested by Stepan Co.

SOURCE: Angus Chemical Co.; Angus Chemical Formulary

**Foam Conditioner for Body and Volume, Aerosol-Packed**

	%W/W
Nasuna B *)	2.0
Cosmedia Polymer HSP 1180	8.0
Eumulgin SML 20	0.3
Ethanol	15.0
Water	74.7

Note: Adjust pH to 6 with triethanolamine

Filling: 92 parts product

8 parts propellant propane/butane 3.5 bar

Valve: Vertical valve and foam nozzle

Formula No. WB71-08

**Setting Lotion, Aerosol-Packed**

	%W/W
I Nasuna B *)	5.0
Ethanol 96%	10.0
Dehydol 100	0.1
II Eumulgin SML 20	0.1
Eumulgin RO 40	0.1
Perfume	0.1
III Water	84.6

Preparation: Phases I and II are mixed until homogeneous and then phase III is added.

Filling: Aerosol cans with vertical valve and foam nozzle are filled (minus 30% safety volume) with:

92% active ingredient solution

8% propellant, e.g. propane/butane 3.5 bar

Formula No. WB71-10

Note: \*) The Nasuna types are not for sale in West Germany.

Various PVP/VA types on the market can be referred to.

**Foam Conditioner**

	%W/W
Lamequat L	6.0
Dehyton K	3.0
1,2-propylene glycol	10.0
Lamacit GML-12	2.0
Ethanol 96%	20.0
Perfume	0.3
Water	58.7

Preparation: Mix perfume with Lamacit GML-12 and ethanol. The remaining ingredients are added in the order given.

Formula No. WB71-11

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Foaming Anti-Dandruff Hair Conditioner

<u>Ingredients:</u>	<u>% by Weight</u>
Cetyltrimethylammonium bromide	10.00
Hydroxyethyl cellulose	1.00
Sodium hydroxide	0.15
Polymer JR 30M	0.50
Bronopol	0.01
Zinc pyridinethione	0.35
Perfume and color	q.s.
Water	q.s. to 100

Formulation PF-0112 from Cosmetics and Toiletries, Vol 100,  
April 1985

Flexible Styler Hair Spray

<u>Ingredients:</u>	<u>% by Weight</u>
Alcohol SD-40	98.20
AMP Regular	0.10
Resyn 28-2930	1.00
Crodamol PTC	0.20
Lanezol AWS	0.20
Crotein ADW	0.30

Procedure:

Add ingredients to alcohol in the order given with mixing.  
Fill.

Formulation PF-0343 suggested by Croda, Inc.

Permethyl Non-Aerosol Hair Spray-Low VOC

<u>Ingredients:</u>	<u>% by Weight</u>
A. SDA 40-2-200	74.00
Gantrez ES-225	9.20
B. AMP Regular	0.40
Permethyl 101A	5.15
Permethyl 102A	10.00
Vigilan AWS	1.00
C. Fragrance	0.25

Procedure:

Mix A together until clear and uniform. Slowly add B ingredients in order, mix until clear solution develops. Next add fragrance as desired.

Formulation PF-0342 suggested by Presperse Inc.

SOURCE: Angus Chemical Co.; Angus Product Formulary

Gel Curl Activator With Lanolin

<u>Ingredient:</u>	<u>Weight%</u>	<u>Function</u>
<b>Part A:</b>		
Carbopol 940 Resin (1)	0.50	Gelling Agent
Deionized Water	55.90	Diluent
Hydrogenated Starch Hydroxylate (2)	9.60	Gloss, Sheen
Glycerin	22.40	Humectant
<b>Part B:</b>		
PEG-60 Lanolin (3)	5.00	Conditioning
Propylene Glycol	3.00	Humectant
Dimethicone Copolyol (4)	2.30	Lubricant
Triethanolamine (99%)	1.00	Neutralizer
Methyl Parabens	0.20	Preservative
Disodium EDTA (5)	0.10	Chelating Agent

(1) BF Goodrich Co.

(2) Glyco Division, Lonza

(3) Croda, Inc.

(4) Dow Corning

(5) Dow Chemical

Preparation Procedure:

- 1) Slowly sift Carbopol 940 into vortex of water, starch, and glycerin while rapidly agitating.
- 2) Separately combine Part B, add to Part A with moderate sweeping agitation.

Formula C0025

Clear Curl Activator Gel

<u>Ingredients:</u>	<u>Weight%</u>	<u>Function</u>
Water	78.6	Diluent
Carbopol 940	0.5	Gelling Agent
Glycerin	10.0	Humectant
Propylene Glycol	10.0	Humectant
Methyl Parabens	0.2	Preservative
Propyl Parabens	0.1	Preservative
Triethanolamine (99%)	0.5	Neutralizer
Disodium EDTA	0.1	Chelating Agent
Fragrance	q.s.	

Procedure:

1. Slowly sift Carbopol 940 into the vortex of rapidly agitating water. When resin is dispersed, reduce agitation and mix until homogeneous dispersion is obtained.
2. Separately combine glycerine, glycol, parabens, triethanolamine, EDTA, and fragrance.
3. Add to Carbopol dispersion with moderate sweeping agitation until clear gel is obtained.

Formula C0027

SOURCE: BF Goodrich Co.: Suggested Formulations

Hair Brushing Lotion

	Wt%
A. Amihope LL	0.5
TL-10 (PEG-20 Sorbitan Monolaurate)	0.5
1,3-Butanediol (Butylene Glycol)	0.5
Stearyl Alcohol	0.3
Carbopol 941 (Carbomer 941)*	10.0
B. Water	68.2
C. Ethanol	20.0

\*0.5% wt Carbomer 941 aqueous solution (Neutralized by NaOH)

**Procedure:**

1. Each chemical cited in (A) is weighed in a glass vessel. Heat it to 60-70C and stir until the solution is homogeneous.
2. Add a previously warmed water (B) (60-70C) to the former prepared solution and cool it to room temperature with stirring.
3. Add 20.0g ethanol (C) to the cooled solution with stirring.

**Note:**

This hair brushing lotion has a good antistatic effect and gives good combability. Amihope LL decreased the friction between hair and comb or brush remarkably.

**Usage:**

Spray the hair before brushing.

Hair Brushing Lotion

	Wt%
Amihope LL	0.5
POE (20) Sorbitan Monolaurate (Polysorbate 20)	0.5
Ethanol	99.0

**Procedure:**

Mix all components at room temperature.

**Note:**

This hair brushing lotion is an alcoholic type and has good antistatic effect and smoothness for the hair.

Amihope LL acts as hair conditioning agent instead of the cationic surfactant.

**Usage:**

Spray the hair before brushing.

SOURCE: Ajinomoto USA, Inc.: Suggested Formulations

Hair Conditioner with CAE

<u>Ingredients:</u>	<u>Wt%</u>
Phase A:	
Cetanol	3.0
Amiter LGS-2 (Disteareth-2 Lauroyl Glutamate)	2.0
Nikko1 MYS-55 (PEG-55 Stearate)	1.0
Phase B:	
CAE (PCA Ethyl Cocoyl Arginate)	1.0
A-SM (Stearamine Oxide)	3.0
ProdeW 100 (Sorbitol & Sodium Lactate & Proline & Sodium PCA & Hydrolyzed Collagen)	2.0
Glycerin	10.0
Methyl paraben	0.2
Water	77.8

Specifications:

pH: 5.0  
Vis: 2500 cps

Procedure:

Mix ingredients phase A and heat to 75-80 degrees C. Mix ingredients phase B and heat to 75-80 degrees C. Add phase A to phase B and mix with homomixer (1500 to 2500 rpm). Cool to 35 degrees C.

This hair conditioner has good antistatic and conditioning effects.

SOURCE: Ajinomoto USA Inc.: Formula No. 1 CR-56-11

Setting Lotion

Normal hold for all climatic zones, easy to comb and wash out.

<u>Ingredients:</u>	<u>% by Weight</u>
Ultrahold Strong	2.00
AMP-95	0.35
Ethanol, abs.	30.00
Water, distilled	67.65
Perfume oil	q.s.

Procedure:

Place ethanol, AMP-95, water and perfume oil in the mixing vessel, add Ultrahold Strong, stir until dissolved, then fill into containers.

SOURCE: Angus Chemical Co.: Angus Product Formulary: Formulation PF-0335 suggested by BASF

Hair Conditioner with Guar Derivative

	%W/W
I Lanette O	12.0
Cetiol V	1.0
II Dehyquart A	1.0
Water	55.0
III Cosmedia Guar C261	1.0
Water	30.0

Preparation: Cosmedia Guar C261 is sprinkled into the hot water from phase III (70C), stirred, left to swell, and cooled to room temperature. Phase I is melted at 70-80C and an emulsion is prepared in the normal way with the hot water phase II.

Phase III is added to the cooled emulsion and homogenized.

Note: Tube filling.

Formula No. VA21-13

Hair Conditioner with Guar Derivative

	%W/W
I Emulgade F special	15.0
Cetiol V	2.0
II Water	41.8
III Cosmedia Guar C261	1.0
Water	40.2

Preparation: See formula VA21-13 above.

Note: Tube filling

Formula No. VA21-15

Vitamin Lecithin Hair Conditioner, Pearly

	%W/W
I Emulgade F special	15.0
Eutanol G	4.0
Comperlan 100	1.5
Tocopherol oil	1.0
Wheatgerm oil	0.5
II Dehyquart A	4.0
Water	74.0

Formula No. VA21-16

Hair Conditioner with Jojoba Oil Substitute

	%W/W
I Emulgade F special	8.0
Soluvit Richter	2.0
Cetiol J600	3.0
II Dehyquart A	3.0
Water	84.0

Formula No. VA21-17

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Hair Conditioning Gel

<u>Ingredients/Trade Name:</u>	<u>% by Weight</u>
Part A:	
Deionized Water	89.94
Hydroxyethylcellulose	0.80
Hydroxypropyl Guar/Hydroxypropyltrimonium Chloride	0.40
Citric Acid	0.06
Methylparaben	0.02
Part B:	
Panthenol	0.30
Sodium PCA/Ajidew N-50	3.00
Partially Deacetylated Chitin (1% Solution)/Marine-Dew	3.00
Polyquaternium-11	2.00
Diazolidinyl Urea	0.30

**Procedure:**

Add part A ingredients in order. Heat to 75 degrees Centigrade. Mix until clear and uniform. Cool to 50 degrees Centigrade. Add part B ingredients in the given order, mixing well after each addition. Continue mixing and cooling to 35 degrees Centigrade.

Appearance: Clear gel

pH: 4.50-5.50

Viscosity: 7,000-10,000 (RVT #5 @ 10 rpm @ 25 degrees C)

Hair Liquid (Soft Type)

	<u>Wt%</u>
(O) Pyroter GPI-25	9.0
2-Hexyldecyl Alcohol	1.0
Ethyl Alcohol	40.0
Methylparaben	0.1
Perfume	q.s.
(W) Ajidew T-50	4.0
Water	45.9

**Procedure:**

1. Dissolve (O) and (W) separately at room temperature to be clear solutions.
2. Add (W) to (O) with stirring.

pH: 7.0

Viscosity: 6 cps

SOURCE: Ajinomoto USA, Inc.: Suggested Formulations



Hair Cream

	Wt%
(O) Liquid Paraffin (#70)	38.0
Isopropyl Myristate	3.0
Squalane	0.5
Nikkol WCB	0.5
Polyoxyethylene (6300) Monostearate	0.1
Glyceryl Monostearate (Self Emulsifying Type)	4.1
Polyoxyethylene (20) Cetyl Ether	2.9
(W) Ajidew N-50	3.0
Water	47.9
Preservative	q.s.

Procedure:

1. Heat (O) and (W) to 80C.
2. Add (W) to (O) slowly with agitation.
3. Finish stirring at 40C.

pH: 7.3

Viscosity: 900 cps

Hair Tonic

	Wt%
(O) Pyroter GPI-25	2.7
Pyroter CPI-40	0.3
Ethyl Alcohol (95%)	50.0
L-Menthol	0.4
Camphor	0.05
Methylparaben	0.05
Perfume	q.s.
(W) Ajidew T-50	4.0
Water	42.5

Procedure:

1. Dissolve (O) and (W) separately at room temperature to be clear solutions.
2. Add (W) to (O) with stirring.

pH: 7.5

Viscosity: 5 cps

SOURCE: Ajinomoto USA, Inc.: Suggested Formulations

Hair Dressing Cream O/W, with Allantoin

	%W/W
I Eumulgin O5	8.0
Eumulgin O10	8.0
Paraffin oil, high viscous	40.0
Vaseline, white	10.0
II Allantoin	0.3
Water	33.7

Formula No. WF11-05

Hair Dressing Gel, Transparent

	%W/W
I Eumulgin B1	5.0
Ethyl/isopropyl alcohol	50.0
II Water	38.0
Dehyquart C cryst.	0.2
III Carbopol 940	0.8
IV Triethanolamine	1.0
Water	5.0

Formula No. WF11-07

Hair Dressing Gel

	%W/W
I Nasuna B *)	4.0
Ethyl/isopropyl alcohol	50.0
II Water	38.3
III Carbopol 940	0.7
IV Water	6.0
Triethanolamine	1.0

Formula No. WF11-09

Hair Dressing Gel

	%W/W
I Nasuna B *)	3.0
Isopropyl alcohol	20.0
II Water	70.0
Eumulgin L	0.7
III Carbopol 940	0.8
IV Water	4.5
Triethanolamine	1.0

Formula No. WF11-12

Note: \*) The Nasuna types are not for sale in West Germany.  
Various PVP/VA types on the market can be referred to.

Hair Dressing Gel, Oily

	%W/W
I Eumulgin B3	13.0
Cetiol HE	20.0
Eutanol G	5.0
II Water	62.0

Preparation: Melt I in a water or glycerine bath at approx. 95C.  
Stir II into I at 95C. Cease stirring when the mixture has cooled to 60C, to avoid air pockets forming.

Formula No. WF11-13

SOURCE: Henkel KGaA: Cosmetic Model Formulae

**Hair Moisturizer**

<b><u>Ingredients:</u></b>	<b>%</b>
Phase A:	
H <sub>2</sub> O, Deionized	79.03
Hetoxide G-26 (Glycereth-26)	3.0
Disodium EDTA	0.1
Methyl Paraben	0.15
Phase B:	
Hetamide MA (Acetamide MEA)	1.0
Hetsorb L-20 (Polysorbate 20)	0.2
Hest CSO (Cetearyl Octanoate)	10.0
Hetoxamate SA-100 (PEG-100 Stearate)	0.7
Glyceryl Stearate	0.7
Hest MS (Myristyl Stearate)	0.5
Cocoa Butter	0.5
Cetyl Alcohol	1.5
Hetoxol G (Stearyl Alcohol & Ceteareth-20)	2.5
Propyl Paraben	0.05
Phase C:	
Kathon CG	0.07

**Specifications:**

pH: 5.0

Viscosity #4/30: 7500 cps

**Procedure:**

- 1) In a suitable stainless steel kettle equipped with a Lightnin' mixer, add Phase A. Heat to 75°C while mixing.
  - 2) In a separate stainless steel kettle, add Phase B. Heat to 75°C while mixing until uniform.
  - 3) When both phases reach 75°C, add Phase B to Phase A. Mix until uniform.
  - 4) Cool to 40°C.
  - 5) Add Phase C. Mix well.
- Formula HC93-102

**Hair Pomade**

<b><u>Ingredients:</u></b>	<b>%</b>
Mineral Oil	25.00
Hetlan AC (Acetulated Lanolin)	10.00
Petroleum	50.00
Hest CSO (Cetearyl Octanoate)	2.00
Hest L-2-0 (Laureth-2 Octanoate)	7.00
Paraffin	6.00

**Procedure:**

- 1) In a stainless steel kettle, combine all ingredients. Heat to 70°C, while mixing until completely melted and uniform.
- Formula HP93-101

**SOURCE: Heterene, Inc.; Suggested Formulations**

**Hair Relaxer**  
**Formula 93-0302**

<u>Component:</u>	<u>% By Weight</u>
A. Dermalcare NI	10.0
Mineral Oil	10.0
Cetyl Alcohol	2.0
B. Sodium Hydroxide (50%)	5.0
Deionized Water	63.0
C. Preservative, Fragrance, Dye	q.s.

Blending Procedure:

Heat "A" to 85C, "B" to 55C. With agitation, add "B" to "A". Continue agitation and cool to 35C, then add "C".

Typical Formulation Properties:

Appearance: White, Opaque, viscous cream  
 % Nonvolatile: 20-25

**Hair Relaxer**  
**Formula 93-0309**

<u>Component:</u>	<u>% By Weight</u>
A. Dermalcare DV-4232	10.0
Mineral Oil	10.0
Petrolatum	10.0
Stearyl Alcohol	2.0
B. Deionized Water	62.0
Propylene Glycol	3.0
C. Sodium Hydroxide (50%)	3.0
Preservative, Fragrance, Dye(s)	q.s.

Blending Procedure:

Heat "A" and "B" separately to 75C. With agitation, add "B" to "A". Continue agitation until uniform and cool to 55C, then add "C" (without preservative, fragrance and dye). Continue agitation until uniform and cool to 35C. Then add compatible preservative, fragrance and dye.

Typical Formulation Properties:

Appearance: White, opaque, viscous cream  
 % Nonvolatile: 30-35%

**SOURCE: Rhone-Poulenc Surfactants & Specialties: Formulas**

Hair Rinse Emulsion

	%W/W
I Lanette O	0.3
Dehyquart SP	0.6
II Water	99.1
Formula No. VC21-01	

Hair Rinse Emulsion

	%W/W
I Emulgate F spec.	14.5
II Dehyquart C cryst.	0.6
Nasuna B	3.0
Citric acid	0.5
Isopropanol	81.4

Note: When used, the concentrate is diluted with water at a ratio of 1:7!

Formula No. VC21-03

Hair Rinse

	%W/W
Dehyquart SP	0.6
Antara 430	0.1
Citric acid	0.3
Water	99.0
Formula No. VC21-05	

Hair Rinse, Clear, Fat-Free

	%W/W
Polyquart H81	2.0
Citric acid	0.2
Water	97.8
Formula No. VC51-02	

Hair Rinse, Clear, Fat-Free

	%W/W
Dehyquart LT	0.4
Citric acid	0.5
Water	99.1
Formula No. VC51-04	

Hair Rinse, Fat-Free

	%W/W
Dehyquart A	2.0
Eumulgin L	0.8
Water	97.2
Formula No. VC51-07	

Hair Rinse Foam, Aerosol-Packed

	%W/W
Dehyquart SP	0.6
Citric acid	0.5
Cetiol HE	1.0
Water	97.9
Filling: 92 parts solution/8 parts propellant 12/114/Foam nozzle	
Formula No. VC71-01	
SOURCE: Henkel KGaA: Cosmetic Model Formulae	

### Hair Sculpturing Treatment (Formula 90-0501M)

This light conditioning formula provides a soft hold that is ideally suited for hair modeling and sculpturing. Unlike most styling treatments that leave the hair tacky and stiff, this unique formula demonstrates superb styling properties and leaves the hair soft and manageable. It also reduces tangles and fly away hair caused by static charges.

Recommended Use Directions: Shampoo and rinse hair as normal. Thoroughly massage sculpturing rinse into wet hair. Do not rinse out. Towel dry hair as normal. Style and sculpture hair as desired and blow dry.

	<u>% by Weight</u>
Mirapol A-15	0.50
Jaguar HP-60 COS	0.75
Mirapol 133	3.50
Propylene Glycol	0.50
Glycerine	1.00
Citric Acid	Q.S.
Fragrance, Dye(s), Preservative	Q.S.
Water	74.15
SD Alcohol 40	20.00

Blending Procedure: Blend Propylene Glycol and Glycerine in water. With smooth agitation, disperse Jaguar HP-60 COS in water base. Heat to 50C. Once system is uniform, blend in Mirapol A-15. Adjust formulation pH to 3.5-4.5 with citric acid as needed. Slowly blend in Mirapol 133 and mix until uniform. Cool with smooth agitation to 30-35C and blend in compatible Fragrance, Dye(s), and Preservative. Once system is uniform, blend in SD Alcohol 40.

#### Typical Formulation Properties:

Appearance @ 25C:	Clear to Slightly Hazy Liquid
Viscosity @ 25C:	1,000-3,000 cps
pH:	3.5-4.5

### Flexible Hold Styling Mousse (Formula 90-0102M)

This styling mousse formula provides a soft hold for all hair types. It incorporates extra body building ingredients which help protect the hair from blow drying and repeated styling treatments. This styling mousse is ideally suited for both aerosol and pump dispenser applications.

	<u>% by Weight</u>
Mirataine BET-O-30	1.50
Mirataine CBC	1.50
Mirapol 133	2.00
Fragrance, Dye, Preservative	Q.S.
Water	95.00

Blending Procedure: Charge water into mixing vessel. With smooth agitation, slowly blend in Mirataine BET-O-30 and Mirataine CBC and mix until uniform. With smooth agitation, slowly blend in Mirapol 133 and mix until uniform. Add compatible Fragrance, Dye, and Preservative

SOURCE: Rhone-Poulenc Surfactants & Specialties: Formulas

**Hair Setting Cream**  
(Formula 84-0804)

	<u>% By Weight</u>
<u>Phase I:</u>	
H <sub>2</sub> O	74.3
Carbopol 940 (BF Goodrich)	0.2
<u>Phase II:</u>	
PVP-VA 335	5.0
DEA	1.0
SD-40 Alcohol	10.0
<u>Phase III:</u>	
Alkamuls GMS	4.0
Dermalcare DV-4232	5.0
Cetyl Alcohol NF	0.5
<u>Blending Procedure:</u>	

Charge water into mixing vessel and heat to 35-40C. With rapid and smooth agitation, slowly sift Carbopol 940. Mix until completely uniform. In separate mixing vessels, prepare Phase II and Phase III. Heat Phase III to 75-80C. Slowly blend Phase II into Phase I and mix until uniform. Once system is uniform, blend Phase III into vessel. Cool to 35C and package.

**Permanent Wave**  
(Formula 92-1208)

	<u>% by Weight</u>
Deionized water	82.0
Miranol C2M-SF Conc.	5.0
Ammonium thioglycolate, 100%	8.0
Ammonium hydroxide, 25%	5.0
Perfume	q.s.
Color	q.s.

Procedure:

Add in order listed and mix until uniform.

**Cold Perm (Carbonated)**  
(Formula 92-1210)

	<u>% by Weight</u>
Deionized water	77.0
Miranol C2M-SF Conc.	5.0
Ammonium thioglycolate, 100%	10.0
Ammonium carbonate	5.0
Ammonium hydroxide, 25%	3.0
Perfume	q.s.
Color	q.s.

Procedure:

Add in order listed and mix until uniform.

SOURCE: Rhone-Poulenc Surfactants & Specialties: Formulas

Hairspray

Strong hold, for all climatic zones, easy combability, good brush-out, good wash-out properties.

<u>Ingredients:</u>	<u>% by Weight</u>
Luvimer 100 P	2.40
AMP Regular	0.56
Luviskol VA 37 E	1.20
Ethanol	55.84
Dimethyl ether	40.00
Perfume	q.s.

**Procedure:**

Combine ethanol, AMP and perfume. Add Luvimer 100 P and Luviskol VA 37 E to the solution and mix until clear.

Cloud point: -35C

Pressure: 3.2 bar

Density: 0.76 g/cm<sup>3</sup>

Formulation PF-0295 suggested by BASF

Hairspray

Strong hold, for all climatic zones, easy combability, good brush-out, good wash-out properties.

<u>Ingredients:</u>	<u>% by Weight</u>
Luvimer 100 P	0.60
AMP Regular	0.14
Luviskol VAP 343 E	4.80
Ethanol	54.46
Dimethyl ether	40.00
Perfume	q.s.

**Procedure:**

Combine ethanol, AMP and perfume. Add Luvimer 100 P and Luviskol VAP 343 E to the solution and mix until clear.

Cloud point: -35C

Pressure: 3.2 bar

Density: 0.77 g/cm<sup>3</sup>

Formulation PF-0296 suggested by BASF

SOURCE: Angus Chemical Co.: Angus Product Formulary



Hair Spray

<u>Ingredients:</u>	<u>% by Weight</u>
Luviset CAP	2.00
AMP Regular	0.16
Silicone fluid	0.10
Fragrance	0.05
Methylene chloride	15.00
Ethanol, anhydrous	52.69
Propane/butane, 40/60	30.00

Formulation PF-0120 from Cosmetics and Toiletries, Vol. 100,  
April 1985

Medium Hold Hair Spray

<u>Ingredients:</u>	<u>% by Weight</u>
Luviset CAP	2.00
AMP Regular	0.16
Silicone 566 Fluid	0.10
Propane/ Butane, 40/60	30.00
Ethanol, anhydrous	67.74

Formulation PF-0121 from Cosmetics and Toiletries, Vol 100,  
April 1985

Firm Holding/High Humidity Hair Spray

<u>Ingredients:</u>	<u>% by Weight</u>
Stepanhold Extra	15.00
AMP Regular	0.38
Dimethicone Copolyol Surfactant	0.20
SDA-40A Alcohol	84.42
Fragrance	q.s.

Procedure:

Charge alcohol to mixing vessel. With moderate agitation, add AMP and mix well. Add Stepanhold Extra and mix until completely dissolved. Add dimethicone copolyol and mix thoroughly. Add desired fragrance and mix well.

Formulation PF-0158 suggested by Stepan Co.

SOURCE: Angus Chemical Co.: Angus Product Formulary

Hairspray

Strong hold, for all climatic zones, easy combability, good brush-out, good wash-out properties.

<u>Ingredients:</u>	<u>% by Weight</u>
Luvimer 100 P	2.40
AMP Regular	0.56
Luviskol VAP 343 E	1.20
Ethanol	55.84
Dimethyl ether	40.00
Perfume	q.s.

Procedure:

Combine ethanol, AMP and perfume. Add Luvimer 100 P and Luviskol VAP 343 E to the solution and mix until clear.

Cloud point: -35C  
 Pressure: 3.2 bar  
 Density: 0.76 g/cm<sup>3</sup>

Formulation PF-0297 suggested by BASF

Hairspray

Strong hold, for all climatic zones, easy combability, good brush-out, good wash-out properties.

<u>Ingredients:</u>	<u>% by Weight</u>
Luvimer 100 P	2.40
Ultrahold 8	0.60
AMP Regular	0.62
Ethanol	56.38
Dimethyl ether	40.00
Perfume	q.s.

Procedure:

Combine ethanol, AMP and perfume. Add Luvimer 100 P and Ultrahold 8 to the solution and mix until clear.

Cloud point: -35C  
 Pressure: 3.2 bar  
 Density: 0.76 g/cm<sup>3</sup>

Formulation PF-0298 suggested by BASF

SOURCE: Angus Chemical Co.: Angus Product Formulary

Hairspray

Strong hold, for all climatic zones, easy combability, good brush-out, good wash-out properties.

<u>Ingredients:</u>	<u>% by Weight</u>
Luvimer 100 P	0.60
Untrahold 8	2.40
AMP Regular	0.38
Ethanol	56.62
Dimethyl ether	40.00
Perfume	q.s.

Procedure:

Combine ethanol, AMP and perfume. Add Luvimer P and Ultrahold 8 to the solution and mix until clear.

Cloud point: -35C

Pressure: 3.8 bar

Density: 0.76 g/cm<sup>3</sup>

Formulation PF-0299 suggested by BASF

Hairspray

Strong hold, for all climatic zones, easy combability, good brush-out, good wash-out properties.

<u>Ingredients:</u>	<u>% by Weight</u>
Luvimer 100 P	2.40
Ultrahold Strong	0.60
AMP Regular	0.63
Ethanol	56.37
Dimethyl ether	40.00
Perfume	q.s.

Procedure:

Combine ethanol, AMP and perfume. Add Luvimer 100 P and Ultrahold Strong to the solution and mix until clear.

Cloud point: -35C

Pressure: 3.2 bar

Density: 0.76 g/cm<sup>3</sup>

Formulation PF-0300 suggested by BASF

SOURCE: Angus Chemical Co.: Angus Product Formulary

Hairspray

Strong hold, for all climatic zones, easy combability, good brush-out, good wash-out properties.

<u>Ingredients:</u>	<u>% by Weight</u>
Luvimer 100 P	0.60
Ultrahold Strong	2.40
AMP Regular	0.42
Ethanol	56.58
Dimethyl ether	40.00
Perfume	q.s.

Procedure:

Combine ethanol, AMP and perfume. Add Luvimer 100 P and Ultrahold Strong to the solution and mix until clear.

Cloud point: -35C

Pressure: 3.2 bar

Density: 0.76 g/cm<sup>3</sup>

Formulation PF-0301 suggested by BASF

Pump Setting Spray (100% VOC)

Extra strong hold, for all climatic zones, easy combability, good brush-out, good wash-out properties.

<u>Ingredients:</u>	<u>% by Weight</u>
Luvimer 100 P	6.00
AMP Regular	1.39
Ethanol	92.61
Perfume	q.s.

Procedure:

Combine Ethanol, AMP Regular and perfume. Add Luvimer 100 P to the solution and mix until clear.

Formulation PF-0302 from BASF

Pump Setting Spray (80% VOC)

Strong hold, for all climatic zones, easy combability, good brush-out, good wash-out properties.

<u>Ingredients:</u>	<u>% by Weight</u>
Luvimer 100 P	6.00
AMP-95	1.39
Water	12.61
Ethanol	80.00
Perfume	q.s.

Procedure:

Combine Ethanol, AMP-95 and perfume. Add Luvimer 100 P to the solution and mix until clear.

Formulation PF-0303 from BASF

SOURCE: Angus Chemical Co.: Angus Product Formulary

Hair Spray, Aerosol-Packed

	<u>%W/W</u>
Nasuna B *)	5.0
Ethyl/isopropyl alcohol	75.0
Methylene chloride	20.0

Note: Filling: 40 parts hair lacquer  
60 parts propellant 11/12 (50:50)

In accordance with the German cosmetics legislation, the methylene chloride content must not exceed 35%.

The packaging must bear the following inscription: "Do not spray near flames or glowing objects."

Formula No. WE71-01

Hair Spray, Aerosol-Packed

	<u>%W/W</u>
Nasuna B *)	4.0
Ethyl/isopropyl alcohol	96.0

Note: Filling: 40 parts hair lacquer  
60 parts propellant 11/12 (50:50)

Formula No. WE71-03

Note: \*) The Nasuna types are not for sale in West Germany.

Various PVP/VA types on the market can be referred to.

Hair Dressing Cream O/W

	<u>%W/W</u>
I Eumulgin O5	6.0
Eumulgin O10	6.0
Paraffin oil	60.0
II Water	28.0

Formula No. WF11-01

Hair Dressing Cream W/O

	<u>%W/W</u>
I Dehymuls F	9.0
Paraffin oil	12.0
Vaseline, white	15.0
Cetiol V	10.0
II Henkel Glycerin 86% DAB 9	5.0
Magnesium sulfate-7-hydrate	0.3
Water	48.7

Formula No. WF11-03

Hair Dressing Cream O/W

	<u>%W/W</u>
I Eumulgin B1	5.0
Cutina MD	15.0
Paraffin oil, low viscous	20.0
II Water	60.0

Formula No. WF11-04

SOURCE: Henkel KGaA: Cosmetic Model Formulae

**High Solids Hair Spray-80% VOC**

<u>Ingredients:</u>	<u>% by Weight</u>
OAC-2 (Lovocryl-47)	8.00
AMP-95	1.43
Triethyl citrate (CitroFlex-2)	0.20
Lauramide DEA (Monamid 716)	0.15
Glycerin	0.10
dl-Panthenol	0.10
Deionized water	10.02
Anhydrous ethanol SDA-40	50.00
n-Butane	12.00
DME	18.00
Fragrance, preservative	q.s.

**Recommended Valve Specifications:**

Precision Valve Corp., 0.016 in stem, 0.016 in body, no vapor tap, 0.122 in dip tube; actuator: 0.016 in MB concave Delta.

Formula PF-0277 from Cosmetics & Toiletries, November, 1993.

**High Solids Hair Spray  
Innovative 80% Equivalent**

<u>Ingredients:</u>	<u>% by Weight</u>
OAC-2 (Lovocryl-47)	10.00
AMP-95	1.79
Lauramide DEA (Monamid 716)	0.10
Glycerin	0.10
dl-Panthenol	0.05
Deionized water	32.96
Anhydrous ethanol SDA-40	22.00
DME	33.00
Fragrance, preservative	q.s.

**Recommended Valve Specifications:**

Sequist NS-34, 0.013 in stem, capillary body, 0.013 in vapor tap, 0.040 in dip tube; actuator; Excell 200 Misty 0.016 in Misty.

Formulation PF-0278 from Cosmetics & Toiletries, November, 1993

SOURCE: Angus Chemical Co.: Angus Product Formulary

Instant Hair Conditioner, Clear

	%W/W
Isopropanol	70.0
Cetiol HE	20.0
Dehyquart C cryst.	5.0
Henkel Glycerin 86% DAB 9	5.0
Note: Low viscous	
Formula No. VB51-01	

Instant Hair Conditioner, Fat-Free, Clear

	%W/W
Dehyquart A	4.0
Henkel Glycerin 86% DAB 9	10.0
Viscontran HEC 30 000 PR 2% in water	60.0
Isopropanol	5.0
Water	21.0

Note: High viscous  
Formula No. VB51-03

Hair Conditioning Rinse, Clear

	%W/W
I Eumulgin B2	2.2
Comperlan COD	3.7
Dehyquart A	1.5
Polyquart HB1	2.0
II Citric acid	0.3
Water	90.3

Note: High viscous  
Preparation: Melt phase I at approx. 65C and stir in phase II also heated to 65C. Stir until cooled to approx. 40C.  
Formula No. VB51-05

Hair Conditioning Rinse, Clear

	%W/W
I Eumulgin B2	2.2
Comperlan COD	3.7
Dehyquart A	1.5
II Citric acid	0.3
Water	92.3

Note: High viscous  
Preparation: Melt phase I at approx. 65C and stir in phase II also heated to 65C. Stir until cooled to approx. 40C.  
Formula No. VB51-06

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Instant Hair Conditioner With Jojoba Oil Substitute

	%W/W
I Emulgate A	3.5
Comperlan 100	1.5
Cetiol J600	1.0
II Henkel Glycerin 86% DAB 9	5.0
Dehyquart A	4.0
Water	85.0

Formula No. VB21-24

Conditioning Rinse

	%W/W
I Emulgate K	4.0
II Perfume	0.1
Citric acid, 50% solution	0.1
Water	95.8

Preparation: Sprinkle Emulgate K into the hot water phase (85-90C) stirring continuously. Perfume and preserve when under 40C. Full emulsification occurs at between 30-40C.

Formula No. VB21-26

Conditioning Rinse with Jojoba Oil Substitute

	%W/W
I Emulgate K	5.0
II Cetiol J600	1.5
Perfume	0.1
Citric acid 50% solution	0.1
III Water	93.3

Preparation: Sprinkle Emulgate K into the hot water phase (85-90C) stirring continuously. When the mixture starts to emulsify, immediately add Cetiol J600. Perfume and preserve when under 40C. Full emulsification occurs at between 30 and 40C.

Formula No. VB21-27

Conditioning Rinse with Protein

	%W/W
I Emulgate K	5.0
II Hydagen P	1.0
Water	92.2
III Eutanol G	1.5
Perfume	0.1
Citric acid 50%	0.2

Preparation: Make a paste with Hydagen P and part of the hot water (60C). Stir Emulgate K into the hot water phase (85-90C). Add the Hydagen P/water mixture. Immediately stir in Eutanol G. Stir until cooled to 30-40C. Perfume when under 40C.

Formula No. VB21-28

SOURCE: Henkel KGaA: Cosmetic Model Formulae



Intensive Hair Conditioner Foam, Aerosol-Packed

	%W/W
I Cutina AGS	3.0
Lanette O	4.0
Eumulgin O10	3.0
Cetiol V	2.0
II Dehyton AB30	3.0
Dehyquart SP	1.5
Henkel Glycerin 86% DAB9	8.0
Citric acid	0.5
Water	75.0
Filling: 92 parts solution	
8 parts propellant 12/114 (40:60)	
Foam nozzle	
Formula VA71-01	

Instant Hair Conditioning Cream

	%W/W
I Lanette O	12.0
Cetiol SN	1.0
Comperlan KM	3.0
II Dehyquart A	2.0
Henkel Glycerin 86% DAB 9	5.0
Citric acid	0.5
Water	76.5
Note: Tube filling	
Formula No. VB11-01	

Instant Hair Conditioning Cream

	%W/W
I Lanette 16	2.5
Comperlan KM	5.0
II Dehyquart A	2.0
Henkel Glycerin 86% DAB 9	5.0
Citric acid	1.0
Water	74.5
III Water	10.0
Note: Squeeze-bottle filling	
Formula No. VB11-02	

Instant Hair Conditioning Cream

	%W/W
I Lanette O	12.0
Cetiol SN	1.0
Comperlan KD	3.0
II Dehyquart SP	1.5
Henkel Glycerin 86% DAB 9	5.0
Citric acid	0.5
Water	77.0
Note: Tube filling	
Formula No. VB11-03	

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Instant Hair Conditioner Foam, Aerosol-Packed

	%W/W
I Lanette 16	3.0
Dehyquart A	2.0
II Henkel Glycerin 86% DAB 9	5.0
Citric acid	1.0
Water	89.0
Note: Filling: 92 parts solution	
8 parts propellant 12/114 (40:60)	
Foam nozzle	
Formula No. VB71-01	

Instant Hair Conditioner Foam, Aerosol-Packed

	%W/W
I Emulgade F spec.	3.5
Cetiol V	1.0
II Dehyquart LT	1.5
Henkel Glycerin 86% DAB 9	5.0
Citric acid	1.0
Water	88.0
Note: Filling: 92 parts solution	
8 parts propellant 12/114 (40:60)	
Foam nozzle	
Formula No. VB71-03	

Protein Conditioning Rinse, Aerosol-Packed

	%W/W
I Emulgade F special	2.0
Emulgin B2	1.0
Eutanol G	8.0
II Dehyquart A	8.0
Hydagen P	0.5
Water	30.0
III Cosmedia Guar C261	0.5
Water	50.0

Preparation: Phase I is melted at approx. 70-80°C. Hydagen P is dissolved in Dehyquart A, heated to approx. 60°C, until homogeneous. The hot water (70-80°C) is added. The aqueous phase II is added to phase I. Perfuming and preserving are carried out at under 40°C. Cosmedia Guar C261 is sprinkled into the hot water (70-80°C), stirring strongly. The swollen mixture is added when the emulsion has cooled and homogenized by stirring. The pH is adjusted to approx. 4 with phosphoric acid.

Note: Filling: 89 parts liquid  
11 parts propellant, propane/butane  
Foam nozzle  
Formula No. VB71-04

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Instant Hair Conditioning Cream

	<u>%W/W</u>
I Cutina MD	8.0
Lanette O	2.5
Cetiol V	5.0
II Dehyquart SP	1.5
Henkel Glycerin 86% DAB 9	10.0
Citric acid	0.1
Water	72.9
Note: Tube filling	
Formula No. VB11-05	

Instant Hair Conditioning Emulsion

	<u>%W/W</u>
I Emulgade F	3.5
Cetiol V or Eutanol G	10.0
II Citric acid	3.0
Henkel Glycerin 86% DAB 9	3.0
Perfume lemon	0.2
Water	80.3
Application: 1 teaspoonful in 100 cl water	
Formula No. VB21-01	

Instant Hair Conditioning Emulsion

	<u>%W/W</u>
I Lanette 16	3.0
II Dehyquart A	2.0
Citric acid	1.0
Water	82.0
III Water	12.0
Formula No. VB21-02	

Instant Hair Conditioning Emulsion with Pearly Gloss

	<u>%W/W</u>
I Lanette 16	2.5
Comperlan KM	5.0
II Dehyquart A	2.0
Citric acid	1.0
Water	79.5
III Water	10.0
Formula No. VB21-03	

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Intensive Hair Conditioning Cream

I	Emulgade F	%W/W
		15.0
II	Water	85.0
Formula No. VA 11-01		

Intensive Hair Conditioning Cream

I	Lanette O	%W/W
		12.0
	Hydagen P	2.0
	Wool wax alcohol	6.0
II	Lanette E	3.0
	Water	77.0
Formula No. VA 11-03		

Intensive Hair Conditioning Cream, Herbal Pack

I	Eumulgin B1	%W/W
		1.0
	Emulgade F spec.	15.0
	Wool wax alcohol	4.0
	Eutanol G	5.0
	Vaseline, white	2.0
II	Dehyquart A	2.0
	Hexaplant Richter	3.0
	Citric acid	0.2
	Water	67.8

Note: When used at a ratio of 1:1, the cream must be diluted with water!

Formula No. VA 11-04

Intensive Hair Conditioning Cream, Vitamin Pack

I	Emulgade F spec.	%W/W
		12.0
	Wool wax alcohol	4.0
	Eutanol G	5.0
	Vaseline, white	2.0
II	Dehyquart A	8.0
	Soluvit Richter	3.0
	Citric acid	0.2
	Water	65.8

Note: When used at a ratio of 1:1, the cream must be diluted with water!

Formula No. VA11-05

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Instant Hair Conditioning Emulsion

	%W/W
I Lanette 16	3.0
II Dehyquart A	4.0
Hydagen P	2.0
III Citric acid 10% solution	1.2
Water	89.8

Preparation: Lanette 16 is melted at 75-80C. Hydagen P is dissolved in Dehyquart which is slightly warmed. Then the citric acid solution and the water (75-80C) are added and mixed with phase I while stirring. Stir until completely cooled.  
Formula No. VB21-04

Instant Hair Conditioning Emulsion

	%W/W
I Lanette O	4.0
II Citric acid	1.0
Dehyquart C cryst.	0.6
Water	94.4

Formula No. VB21-05

Instant Hair Conditioning Emulsion

	%W/W
I Emulgade 1000 NI	4.0
Eutanol G	2.0
II Dehyquart SP	1.5
Henkel Glycerin 86% DAB 9	5.0
Citric acid	0.5
Water	87.0

Note: Squeeze-bottle filling  
Formula No. VB21-07

Instant Hair Conditioning Emulsion

	%W/W
I Emulgade 1000 NI	4.0
Eutanol G	2.0
II Dehyquart LT	1.5
Citric acid	0.5
Water	92.0

Formula No. VB21-09

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Intensive Hair Conditioning Emulsion

	%W/W
I Emulgade F spec.	10.0
Cetiol	2.0
II Dehyquart SP	1.5
Henkel Glycerin 86% DAB 9	10.0
Citric acid	0.5
Viscontran MHPC 6000-0.8% solution	20.0
Water	56.0

Note: Tube filling

Formula No. VA21-08

Intensive Hair Conditioning Emulsion

	%W/W
I Lanette O	8.0
Eumulgin B2	2.0
Comperlan 100	1.0
Cetiol B	2.0
II Dehyquart LT	1.5
Henkel Glycerin 86% DAB 9	10.0
Citric acid	0.5
Water	75.0

Formula No. VA21-10

Intensive Hair Conditioning Emulsion

	%W/W
I Cutina AGS	12.0
Eutanol G	2.0
Lanette O	3.0
Comperlan KD	2.0
Dehyquart LT	1.5
II Henkel Glycerin 86% DAB 9	10.0
Citric acid	0.1
Viscontran MHPC 6000-0.8% Solution	20.0
Water	49.4

Formula No. VA21-11

Intensive Hair Conditioning Emulsion

	%W/W
I Emulgade F special	15.0
Comperlan KM	5.0
Eutanol G	2.0
II Dehyquart LDB	2.0
Henkel Glycerin 86% DAB 9	10.0
Citric acid	0.5
Water	65.5

Formula No. VA21-12

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Intensive Hair Conditioning Emulsion

	%W/W
I Lanette O	15.0
Eutanol G	3.0
Vaseline, white	3.0
II Lanette E	3.0
Water	73.8
Citric acid	0.2
III Cholesterin	2.0
Formula No. VA 21-03	

Intensive Hair Conditioning Emulsion for Dry Hair

	%W/W
I Eumulgin B1	1.0
Emulgade F spec.	15.0
Eutanol G	5.0
Wool wax alcohol	2.0
Vaseline, white	2.0
II Hydagen P	2.0
Dehyquart A	2.0
Hexaplast Richter	3.0
Citric acid 10% solution	1.3
Water	66.7

Preparation: Phase I is melted at 75-80C. Hydagen P is dissolved in Dehyquart A which is warmed slightly. The hot water (approx. 80C) and the remaining ingredients of phase II are added and stirred into phase I. Stirring continues until the mixture is cold.

Formula No. VA21-04

Intensive Hair Conditioning Emulsion

	%W/W
I Cutina MD	8.0
Cetiol V	2.0
Lanette O	2.0
Henkel Glycerin 86% DAB 9	10.0
II Citric acid	0.1
Viscontran MHPC 6000 0.8% solution	20.0
Dehyquart A	2.0
Water	55.9

Formula No. VA21-05

SOURCE: Henkel KGaA; Cosmetic Model Formulae

Instant Hair Conditioning Emulsion, Clouding

	%W/W
I Comperlan KM	1.0
Dehyquart LT	2.0
II Henkel Glycerin 86% DAB9	3.0
Citric acid	0.3
Water	93.7

Note: When this hair conditioner is shaken, pearly gloss clouding is produced (suspended material which settles when left to stand).

Formula No. VB21-10

Instant Hair Conditioning Emulsion

	%W/W
I Lanette 16	2.0
Comperlan LP	4.0
II Dehyquart A	4.0
Henkel Glycerin 86% DAB 9	5.0
Citric acid	1.0
Water	84.0

Formula No. VB21-12

Conditioning Rinse with Guar Derivative

	%W/W
I Emulgade 1000 NI	4.0
II Dehyquart A	4.0
Water	51.7
III Cosmedia Guar C261	0.3
Water	40.0

Note: Cosmedia Guar C261 is sprinkled into the hot water from phase III (70C), stirred, left to swell, and cooled to room temperature. Phase I is melted at 70-80C and an emulsion is prepared in the normal way with the hot water phase II. Phase III is added to the cooled emulsion and homogenized.

Squeeze bottle filling.

Formula No. VB21-14

Conditioning Rinse with Guar Derivative

	%W/W
I Emulgade 1000 NI	4.0
II Water	44.5
III Cosmedia Guar C261	1.5
Water	50.0

Note: Cosmedia Guar C261 is sprinkled into the hot water from phase III (70C), stirred, left to swell, and cooled to room temperature. Phase I is melted at 70-80C and an emulsion is prepared in the normal way with the hot water phase II. Phase III is added in the normal way with the hot water phase II. Phase III is added to the cooled emulsion and homogenized.

Squeeze bottle filling.

Formula No. VB21-16

SOURCE: Henkel KGaA: Cosmetic Model Formulae



**Keratin Creme Dry Hair Dressing**

	<b>%W/W</b>
A. Deionized Water	42.70
Carbopol 940-2% Aq. Sol'n. (Carbomer 940)	40.00
Kera-Tein 1000 SD (Hydrolyzed Keratin)	1.00
B. Petrolatum	5.00
Tween 60 (Polysorbate 60)	1.50
Arlacel 60 (Sorbitan Stearate)	1.50
Olive Oil	2.00
Cetyl Alcohol	1.00
Isopropyl Palmitate	2.00
Jojoba Oil	0.10
Castor Oil	1.00
Proto-Lan 8*	1.00
C. Triethanolamine - 99%	1.20
Fragrance, Preservatives	q.s.
*CTFA: Lecithin (and) Butyl Stearate (and) Cocoyl Hydrolyzed Collagen (and) Oleoyl Sarcosine (and) Sesame Oil (and) Lanolin Alcohol.	

**Procedure:**

Heat Phases A & B separately to 80C. Add Phase B to A at 80C with agitation. Mix until smooth. Add Phase C carefully to avoid aeration.

**Properties:**

A leave-in creme hair dressing which conditions, reduces split ends and dryness. Proto-Lan 8 contains proteins, essential fatty acids and phospholipids which replenish and rejuvenate overworked and stressed hair. Kera-Tein 1000 SD moisturizes, protects and strengthens the hair. Leaves a natural shine and smooth finish.

**Uses:**

For wet or dry hair--Massage a small amount into the hair and especially into the ends to improve natural shine, styling and softness.

**SOURCE:** Maybrook Inc.; Formulation #HC-511

**Keratin Infused Hair Treatment**

	<u>%W/W</u>
A. Panthenol	0.10
Methyl Paraben	0.20
Fragrance	0.20
Polysorbate 80	0.50
SD Alcohol 40A	2.00
B. Deionized Water	87.30
Dowanol DPM (PPG-2 Methyl Ether)	1.00
Gafquat 755N (Polyquaternium-11)	1.00
Kera-Tein 1000 AS (Ethyl Ester of Hydrolyzed Keratin)	3.00
Quat-Pro S 30 (Stearyltrimonium Hydroxyethyl Hydrolyzed Collagen)	1.00
Quaternium-15	0.20
Amersil DMC-357 (Dimethicone Copolyol)	0.50
C. Dow Corning 929 Emulsion (Amodimethicone and Tallowtrimonium Chloride and Nonoxynol-10)	3.00

**Procedure:**

Pre-mix Phase A until clear. Add water from Phase B to Phase A. Add the rest of the (B) ingredients with mixing. Mixture should be clear at this stage. Add Phase C (mixture becomes milky).

**Properties:**

A leave-in conditioner/detangler for adding body and shine to the hair. Makes fine, limp hair feel thicker, more manageable. The Quat-Pro S 30 adds body and smoothness due to its high molecular weight. Kera-Tein 1000 AS is a cationic, keratin derivative which adds shine and combability to this product.

SOURCE: Maybrook Inc.: Formula #HC-510

**Extra Rich Conditioner**

	<u>Weight, %</u>
Mackine 601	2.5
Cetyl Alcohol	1.8
Mackpro WLW	2.0
Phosphoric Acid	1.6
Sodium Chloride	0.3
Mackstat DM	q.s.
Water, Dye, Fragrance qs to	100.0

**Procedure:**

1. Add first five components to water and heat to 70C.
2. With stirring, cool to 50C.
3. Add dye, Mackstat DM and fragrance.
4. Cool and fill.

SOURCE: McIntyre Group Ltd.: Suggested Formulation

Light Holding/Body Building Hair Spray

<u>Ingredients:</u>	<u>% by Weight</u>
Stepanhold Extra	11.88
AMP Regular	0.30
Dimethicone Copolyol Resin Modifier	0.15
Panthenol	0.20
PPG-10 Methyl Glucose Ether	0.10
SDA-40A Alcohol	87.37
Fragrance	q.s.

**Procedure:**

Charge alcohol to mixing vessel. With moderate agitation, add AMP and mix well. Add Stepanhold Extra and mix until completely dissolved. Add dimethicone copolyol, panthenol, and PPG-10 methyl glucose ether, mixing well after each addition. Add desired fragrance and mix thoroughly. Formulation PF-0162 suggested by Stepan Co.

Forever Curls Hair Spray

<u>Ingredients:</u>	<u>% by Weight</u>
Crovol A-70	1.00
Ethanol SDA-40	63.50
Amphomer 28-4910	0.75
Deionized Water	33.62
AMP-95	0.13
Hydrotriticism QL	1.00

**Procedure:**

Dust Amphomer into alcohol under vigorous agitation. Premix water, AMP-95 and Crovol A-70. Add alcohol solution to water solution with mixing. When clear, mix in Hydrotriticism QL. Formulation PF-0169 suggested by Croda Inc.

Conditioning Firm Hold Hair Spray

<u>Ingredients:</u>	<u>% by Weight</u>
Stepanhold Extra	13.75
AMP-Regular	0.35
Ammonyx KP	0.50
Methyl gluceth-20	0.25
SDA-40A Alcohol	85.15
Fragrance	q.s.

**Procedure:**

Charge alcohol to vessel. With moderate agitation, add AMP-Regular. Mix well. Add Stepanhold Extra. Mix until completely dissolved. Add Ammonyx KP. Mix thoroughly. Add methyl gluceth-20. Mix until completely dissolved. Add fragrance. Mix well. Formulation PF-0178 suggested by Stepan Co.

SOURCE: Angus Chemical Co.: Angus Product Formulary

Liquid Protein Protective Hair Finish

	<u>%W/W</u>
A. Deionized Water	89.4
Methylparaben	0.2
Celquat L-200 (Polyquaternium-4)	0.2
Sodium Benzoate	0.2
B. Citric Acid, granular	0.4
Quat-Pro S30 (Stearyltrimonium Hydroxyethyl Hydrolyzed Collagen)	1.0
Cationic Collagen Polypeptides	3.0
Carsquat CT 429 (Cetrimonium Chloride)	0.3
Dowicil 200	0.2
C. Isopropyl Alcohol	5.0
Fragrance	0.1

Procedure:

1. Mix and heat Phase A to 160F. Mix until dissolved. Heat off.
2. Mix and cool to 120F.
3. Add Phase B.
4. Pre-mix Phase C and add to the rest of the batch.

Properties:

This protective styler utilizes the protective and film-forming properties of proteins to coat and seal the hair. Quat-Pro S30 and Cationic Collagen Polypeptides are cationic, enhanced proteins which build body and add a smooth, natural texture to the hair due to their moisture binding properties. The high molecular weight of these substantive proteins will gently set the hair. The two polymeric quats add an easy to style combing ability.

SOURCE: Maybrook Inc.; Formula #HC-508

Wheat Germ Foaming Conditioner

	<u>Weight, %</u>
Mackam 35	10.0
Mackalene 116	8.0
Mackalene 716	1.0
Natrosol 250 HHR	0.7
Mackstat DM	q.s.
Water, Dye, Fragrance qs to	100.0

Procedure:

1. Completely hydrate Natrosol.
2. Add first three components and heat to 40C.
3. Blend until clear.
4. Add remaining components and cool.

SOURCE: McIntyre Group Ltd.; Suggested Formulation

**Low Cost 80% VOC Aerosol Hair Spray**

<u>Ingredients:</u>	<u>% by Weight</u>
Resyn 28-2930	5.00
AMP-95	0.47
Anhydrous Ethanol, SDA-40	65.00
Deionized Water	14.53
Propellant A-31	6.40
Propellant A-108	8.60

Pressure: 75 psi  
 Cloud Point: -12C  
 Spray Rate: 0.72 grams/second

**Procedure:**

Dissolve AMP in anhydrous ethanol and water. While maintaining good agitation, slowly sift in Resyn 28-2930. When solution is complete, filter and fill. Charge cans with propellants.

**Valve Specifications: Precision Valve:**

Stem: 04-1215 0.16  
 Gasket: 05-0310 Buna  
 Spring: 06-6010 SS  
 Body: 07-7910 .013"  
 Cup: 32-7300-62 Flat, ET/B, Dimpled, FBS  
 Dip Tube: 09-2010 0.122" ID  
 Actuator: Concave Delta .020" MB

Formulation PF-0285 suggested by National Starch and Chemical Co.

**Superhold Pump Hair Spray**

<u>Ingredients:</u>	<u>% by Weight</u>
Dow Corning Q2-5220	0.50
Gantrez ES-225	10.00
AMP Regular	0.20
SD Alcohol 40	89.30

**Procedure:**

Weigh out the alcohol and dissolve the AMP Regular into it. Stir in the resin and the Dow Corning Q2-5220 resin modifier. Mix until uniform and add the fragrance, if desired. Dow Corning 193 or Dow Corning 190 surfactant can be substituted for Dow Corning Q2-5220 resin modifier.

Formulation PF-0286 suggested by Dow Corning

SOURCE: Angus Chemical Co.: Angus Product Formulary

**Maximum Keratin Therapy**  
**(For Extremely Damaged Hair)**

Hair is composed of Keratin protein. As hair becomes damaged and abused, protein is lost. The hair becomes weaker, more difficult to manage and loses its gloss and liveliness.

This formulation will replenish protein lost from the hair with a soluble keratin protein. Kera-Tein 1000 has been made with the optimum molecular shape and weight so as to maximize its coating and repair properties. It will help seal extremely damaged hair improving its texture and shine.

'Maximum Keratin Therapy' should be applied after shampooing and left on for 15-20 minutes prior to rinsing.

	<u>%W/W</u>
A. Deionized Water	85.15
Methylparaben	0.20
Celquat H-100 (Polyquaternium-4)	0.30
Kera-Tein 1000 (Hydrolyzed Keratin)	10.00
Cationic Collagen Polypeptides	1.00
Cetrimonium Chloride	0.20
Ceraphyl 60 (Quaternium-22)	0.30
Dowicil 200 (Quaternium-15)	0.20
B. Ivarlan AWS (PPG-12-PEG-65 Lanolin Oil)	2.00
Polysorbate 20	0.50
Fragrance	0.15

**Procedure:**

1. Dissolve Methylparaben and Celquat in the water. Slight warming may be necessary to solubilize the Paraben.
2. Add the rest of Phase A. Mix.
3. Premix Phase B and add. Mix.

**SOURCE:** Maybrook Inc.; Formulation #HC-503

**Clear Leave-On Hair Conditioner**

	<u>Weight, %</u>
Mackalene 426	8.0
Natrosol 250 HHR	1.0
Mackstat DM	q.s.
Deionized Water, Dye, Fragrance qs to	100.0

**Procedure:**

1. Completely disperse Natrosol in water.
2. Add Mackalene 426 and blend until clear.
3. Heat to 40C and add remaining components.

**SOURCE:** McIntyre Group Ltd.; Suggested Formulation

**Mink Anti-Dandruff Hair Groom**

A very effective hair groom for controlling dandruff. Holds hair in place, provides thickness to the hair shaft and produces a rich luster.

	<u>Wt. %</u>
A. Glyceryl Stearate, pure (Cerasynt SD, Van Dyk)	1.0
Stearic Acid XXX (Emersol 132, Emery)	2.5
Lanolin Fatty Acids (Amerlate LFA, Amerchol)	0.5
Cetyl Palmitate (Standamul 1616, Henkel)	3.5
Mineral Oil (Carnation, Sonneborn)	12.0
Mink Oil (Heavy Fraction, Emulan)	10.0
B. Water	50.0
Triethanolamine, 99%	0.6
Sorbitol, 70% (Sorbo, ICI)	7.5
C. Zinc Pyrithione, 48% (Omadine, Olin)	0.5
Water	10.7
D. Propylene Glycol (and) Diazolidinyl Urea (and)	
Methyl Paraben (and) Propyl Paraben	
(Germaben II, Sutton)	1.0
Perfume	0.2

**Procedure:**

1. Melt Phase A. Hold at 75C.
2. Heat Phase B to 75C, then add to Phase A via high speed propellor agitation. Stir cool to 45C.
3. Add Phase C and D at 45C.

SOURCE: Emulan, Inc.: Suggested Formulation

**Cream Rinse**

This viscous cream rinse offers extended life to curly, wavy hair in high humidity conditions. Lexorez 100 contributes to this attribute and also lends to the hair's shine.

	<u>%w/w</u>
A. Deionized Water	84.10
Preservatives	QS
B. Stearamidopropyl Dimethyl and Glycol Stearate and	
Ceteth-2 (Lexate CRC)	4.70
Mineral Oil NF (5 LT)	4.70
Glycerin/Diethylene Glycol/Adipate Crosspolymer	
(Lexorez 100)	4.70
Cetyl Alcohol (Cetal)	0.90
PEG-150 Distearate (Kessco PEG 6000 Distearate)	0.90
C. Citric Acid NF	QS pH = 4.5

**Procedure:**

1. Combine section "A" and heat to 75C.
2. Combine section "B" and heat to 70C.
3. Immediately begin cooling to ambient temperature. Agitate continuously.
4. At 40C adjust pH to approximately 5 with phase "C".

SOURCE: Inolex Chemical Co.: Formula CD-105

**Moisturizing Styling Spray**  
(Formula 90-0103M)

This specially formulated moisturizing spray demonstrates superb holding properties for optimum styling and sculpting ease. This formula should be applied to the hair as a fine mist with a pump dispenser or aerosol spray.

	<u>% By Weight</u>
SD Alcohol 40	15.00
Propylene Glycol	0.50
Polycare 133	2.00
Fragrance, Dye, Preservative	Q.S.
Water	82.50

**Blending Procedure:**

Charge water into mixing vessel and slowly blend in propylene glycol. With rapid but smooth agitation, slowly blend Polycare 133 water and mix until completely uniform. Add SD Alcohol 40 and then blend in fragrance, dye and preservative.

**CTFA Identification:** Water, SD Alcohol 40, Polymethacrylamidopropyl Trimonium Chloride, Propylene Glycol, Fragrance, Preservative, Dye.

**Hair Conditioner/Rinse**  
(Formula 92-1203)

	<u>% by Weight</u>
Miranol DM Conc 45%	15.0
Alkamuls EGMS	2.5
Cetyl Alcohol NF	2.0
Jaguar C13S	0.3
Citric Acid	Q.S. to pH 4-5
Fragrance, dyes, preservatives	Q.S.
Deionized Water	80.5

**Procedure:**

Disperse Jaguar C13S thoroughly in water. Adjust pH with citric acid to 4-5 and warm to 70-75C, then blend in Alkamuls EGMS, Miranol DM and cetyl alcohol. With smooth agitation, cool system to 40-45C and add compatible fragrance, dyes and preservative.

**Typical Formulation Properties:**

Appearance:	Opaque/pearlescent, viscous liquid
pH:	5-6
% Non-Volatile:	12

**CTFA Identification:** Water, stearoamphoacetate, glycol stearate, cetyl alcohol, guar hydroxypropyl trimonium chloride, fragrance, citric acid, dyes, preservatives.

**SOURCE:** Rhone-Poulenc Surfactants & Specialties: Formulas



Non-Aerosol Hair Spray w/Permethyl 101A

<u>Ingredients:</u>	<u>% by Weight</u>
A. SD Alcohol 40, 190 proof	84.10
Gantrez ES 225	7.20
B. AMP Regular	0.20
Permethyl 101A	8.00
Vigilan AWS	0.50
Fragrance	q.s.

**Procedure:**

Mix Gantrez into alcohol with high speed agitation, when solution is clear, add AMP. Slowly add Permethyl and Vigilant. Maintain clarity and adjust fragrance to desired level. Formulation PF-0340 suggested by Presperse, Inc.

Permethyl Non-Aerosol Hair Spray

<u>Ingredients:</u>	<u>% by Weight</u>
A. SDA 40-2-200	83.85
Gantrez ES-225	7.20
B. AMP Regular	0.20
Permethyl 102A	8.00
Vigilan AWS	0.50
C. Fragrance	0.25

**Procedure:**

Mix A together until clear and uniform. Slowly add B ingredients in order, mix until clear solution develops. Next add fragrance as desired. Formulation PF-0341 suggested by Presperse Inc.

Spritz-A-Style Hair Spray

<u>Ingredients:</u>	<u>% by Weight</u>
Alcohol SD-40	78.19
AMP Regular	0.45
Gantrez ES-225	9.00
Crovol A-70	1.00
Croton ADW	2.00
Deionized Water	9.36

**Procedure:**

Add ingredients to alcohol in the order given with mixing. Fill. Formulation PF-0344 suggested by Croda Inc.

SOURCE: Angus Chemical Co.: Angus Product Formulary

**Non-Lye Hair Relaxer Cream**  
**(Formula 93-0304)**

<u>Component:</u>	<u>% By Weight</u>
A. Dermalcare DV-4232	10.0
Mineral Oil	10.0
Petrolatum	7.5
B. Deionized Water	55.1
Chel CD*	0.2
Ammonia (28%)	8.4
Thioglycolic Acid	8.8
C. Preservative, Dye	q.s.

**Blending Procedure:**

Heat "A" to 85C, "B" to 45C. With agitation, add "B" to "A". Continue agitation until uniform and cool to 35C, then add "C". Adjust pH to 9.0 with ammonia, as needed.

**Typical Formulation Properties:**

Appearance:	Opaque, viscous cream
% Nonvolatile:	30-35

**CTFA Identification:**

Water, Mineral Oil, Petrolatum, Cetearyl Alcohol (and) Polysorbate 60, Thioglycolic Acid, Ammonia, Chelating Agent, Preservative, Dye(s).

\*Chel CD (Cyclohexane Diamine Tetraacetic Acid)

**Clear Gel Hair Pomade**  
**(Formula 92-0228)**

<u>Step A:</u>	<u>% By Weight</u>
Proto-Lan 8	0.8
Mirasil PTM	0.5
Provol 50	1.0
Lantrol	2.0
Co-Gell A-2	14.0
Kaydol Mineral Oil	67.4
<u>Step B:</u>	
Co-Gell B270	14.0
Fragrance	0.3

**Blending Procedure:**

Heat Step A to 77-80C with agitation. Add Step B and continue heating to 90-100C, let stand for 90 minutes. Cool to 75C, then add Fragrance with slow mixing and let stand for 30 minutes. Package and cool.

**CTFA Identification:** Mineral Oil, Aluminum Isostearate, Laurate, Palmitate, Isopropyl Palmitate and Fragrance.

**SOURCE:** Rhone-Poulenc Surfactants & Specialties: Formulas

Professional Care Intensive Conditioner

	<u>%W/W</u>
A. Ammonyx 4 (Stearalkonium Chloride)	6.00
Deionized Water	83.20
Cationic Collagen Polypeptides	2.00
Kera-Tein 1000 (Hydrolyzed Keratin)	1.00
B. C-Base (Mineral Oil and PEG-30 Lanolin and Cetyl Alcohol)	5.00
Petrolatum	0.50
Isopropyl Myristate	1.00
Stearyl Alcohol-70%	1.00
C. Fragrance	0.30
Preservatives	q.s.

**Procedure:**

- 1) Heat phases A & B separately to 75C.
- 2) Add Phase B to Phase A at 75C. Mix.
- 3) Mix and cool to 35C.

**Properties:**

This intensive conditioning treatment utilizes the time-proven softening benefits of Stearalkonium Chloride along with the moisturization and body building benefits of proteins. Kera-Tein 1000 is derived from hair while Cationic Collagen Polypeptide is a cationic, high molecular weight collagen. The combination of these two proteins provides an optimum balance of hair moisturizing, sealing and strengthening. C-Base is the basis for the emulsification system.

SOURCE: Maybrook Inc.: Formula #HC-505

Cream Hair Conditioner

	<u>Weight, %</u>
A. Oleyl Alcohol	10.0
Cetyl Alcohol	2.5
Mackester EGMS	3.0
BHA	0.1
B. Mackalene 316	25.0
Paragon II	q.s.
Water, Dye, Fragrance qs to	100.0

**Procedure:**

1. Heat part A to 70C.
2. Add Mackalene 316 to water and heat to 70C.
3. Add A and B and with continuous blending cool to 45C.
4. Add remaining components and cool.

SOURCE: McIntyre Group Ltd.: Suggested Formulation

**Professional Treatment Conditioner**  
**(Formula 6-0907M)**

Miracare CT-100 is a flaked conditioner concentrate specially formulated to produce high performance hair care products. Based on a unique conditioning agent, Cetrimonium Bromide, Miracare CT-100 readily disperses in 75-80C water to form elegant creme rinse products which gently condition the hair leaving it soft and manageable. The distinct feel imparted on the hair by Miracare CT-100 makes it a favorite of professional beauticians.

	<u>% by Weight</u>
Cetyl Alcohol NF	1.0
Miracare CT-100	4.0
Fragrance, Dye, Preservative	Q.S.
Water	95.0

**Blending Procedure:**

Warm water to 75-80C. With smooth agitation, slowly blend in Miracare CT-100 followed by the Cetyl Alcohol NF. Mix until completely uniform. Cool to 40C with smooth agitation and blend in compatible Fragrance, Dye(s), and Preservative.

**Typical Formulation Properties:**

Appearance After 24 Hrs.:	Viscous, Opaque Lotion
% Non Volatiles:	4-6
pH (10% Aq.):	3-5

**CTFA Identification:** Water, Stearyl Alcohol, Cetrimonium Bromide, Cetyl Alcohol, Fragrance, Preservative, Dye(s).

**"Light" Creme Rinse Conditioner**  
**(Formula 88-0806)**

	<u>% by Weight</u>
Rhodaquat M242B/99	0.80
Cetyl Alcohol NF	4.00
Citric Acid	0.20
Fragrance, Dye(s), Preservative	Q.S.
Water	95.00

**Blending Procedure:**

Dissolve Citric Acid in water and heat to 70-75C. With smooth agitation, slowly blend in Rhodaquat M242B/99 followed by Cetyl Alcohol NF. Mix until completely uniform. With smooth agitation, cool system to 40-45C and blend in compatible Fragrance, Dye(s), and Preservative.

**Typical Formulation Properties:**

Appearance After 24 Hours:	Viscous, Opaque Lotion
pH:	2.2-3.2
Viscosity After 24 Hours (25C):	5,000-8,000 cps (No. 4 @ 10 RPM)
<b><u>CTFA Identification:</u></b> Water, Cetyl Alcohol, Cetrimonium Bromide, Citric Acid, Fragrance, Preservative, Dye(s).	

**SOURCE:** Rhone-Poulenc Surfactants & Specialties: Formulas

Protein & Lanolin Hot Oil Treatment

	<u>%W/W</u>
Deionized Water	40.50
Collagen Hydrolyzate Cosmetic N55 (Hydrolyzed Collagen)	3.00
Quat-Pro S30 (Stearyltrimonium Hydroxypropyl Hydrolyzed Collagen)	1.00
Solulan L575 (PEG-75 Lanolin)	50.00
Ammonyx 4 (Stearalkonium Chloride)	5.00
Fragrance	0.20
Quaternium-15	0.30

**Procedure:**

Heat Water and Ammonyx to 75C. Mix until dissolved. Add Solulan and mix until clear and uniform. Cool to 50C. Add CHC N55 and Quat-Pro S30. Cool to 40C, add fragrance and Quaternium. Product will opacify as it cools.

**Properties:**

A Hot Oil treatment which revitalizes hair and fights damage caused by styling, chemical treatments and weather exposure. This Protein & Lanolin enriched formula is heat activated to condition and then rinse clean. Quat-Pro S is particularly attracted to the most damaged areas of the hair.

**Directions:**

Heat product in hot tap water. This will clear it. Note: Product is opaque and will separate at room temperature. Wet hair and massage in for one minute. Rinse hair with warm water. Shampoo and dry hair as usual.

SOURCE: Maybrook Inc.: Formula #HC-801

Pump Type Hair Spray

	<u>Weight, %</u>
Resyn 26-1314	6.0
Mackpro Conditioner*	0.3
Deionized Water	7.6
Ethanol, Fragrance qs to	100.0

**Procedure:**

1. Dissolve Resyn 26-1314 in alcohol.
2. Add remaining components and blend until clear.

\*Based on 100% concentration.

SOURCE: McIntyre Group Ltd.: Suggested Formulation

Pump Hair Spray

Alcohol SD 40-A	80.00%
Octylacrylamide/Acrylates/Butylaminoethyl Methacrylate Copolymer (Amphomer)	3.50
Aminomethyl Propanol	0.61
Pecosil SWP-83 (Hydrolyzed Wheat Protein/Dimethicone Copolyol Phosphate Copolymer)	0.10
Phoenamid LD (Lauramide DEA)	0.10
Deionized Water	15.49
Fragrance	0.20

**Procedure:**

Sprinkle the Amphomer into the alcohol under propeller agitation. When the Amphomer is completely dissolved, add the remaining items with continuous propeller agitation.  
Formula 14-63-A

Hair Styling Gel

<u>A</u> Deionized Water	85.95%
Carbomer 940	1.00
<u>B</u> Deionized Water	3.00
Triethanolamine (99%)	1.00
<u>C</u> Vinylcaprolactam/PVP/Dimethylaminoethylmethacrylate Copolymer	7.50
<u>D</u> Silicone Quaternium-5 (Pecosil SMQ-40)	1.50
<u>E</u> Methylchloroisothiazolinone (and) Methyliso- thiazolinone	0.05

**Procedure:**

Disperse Carbomer in Phase A water. When a uniform dispersion is obtained, add Phase B to Phase A. Slowly sweep in Phase C, Phase D and Phase E until a uniform gel is obtained.

SOURCE: Phoenix Chemical, Inc.: Suggested Formulations

Pump Hair Spray

<u>Ingredients:</u>	<u>% by Weight</u>
Alcohol SD 40-A	80.00
Amphomer	3.50
AMP-95	0.61
Pecosil SWP-83	0.10
Phoenamid LD	0.10
Deionized water	15.49
Fragrance	0.20

**Procedure:**

Sprinkle the Amphomer into the alcohol under propeller agitation. When the Amphomer is completely dissolved, add the remaining items in order with continuous propeller agitation.

Formulation PF-0320

Aerosol Spray

Normal hold for all climatic zones, easy to comb and wash out.

<u>Ingredients:</u>	<u>% by Weight</u>
Ultrahold Strong	2.00
AMP Regular	0.25
Ethanol abs.	47.75
Propane/butane	50.00
Perfume oil	q.s.

**Procedure:**

Place ethanol, AMP Regular and perfume oil in the stirrer vessel, add Ultrahold Strong and stir until dissolved. Fill into containers.

Cloud point: Still clear at -35C

Pressure: 3.6 bar

Density: 0.6548

Formulation PF-0327 suggested by BASF

SOURCE: Angus Chemical Co.: Angus Product Formulary

Pump Hair Spray  
Regular Hold

<u>Ingredients:</u>	<u>% by Wt</u>
Advantage V Resin	8.00
AMP-95	0.25
SD Alcohol 40	76.00
Distilled Water	15.75
Plasticizer	q.s.
Fragrance, etc.	q.s.

Pump Hair Spray  
Super Hold

<u>Ingredients:</u>	<u>% by Wt</u>
Advantage V Resin	12.00
AMP-95	0.37
SD Alcohol 40	74.00
Distilled Water	13.63
Plasticizer	q.s.
Fragrance, etc.	q.s.

Pump Hair Spray  
Maximum Hold

<u>Ingredients:</u>	<u>% by Wt</u>
Advantage V Resin	14.00
AMP-95	0.43
SD Alcohol 40	73.00
Distilled Water	12.57
Plasticizer	q.s.
Fragrance, etc.	q.s.
Formulations PF-0263 suggested by ISP	

Pump Hair Spray  
Regular Hold

<u>Ingredients:</u>	<u>% by Wt</u>
Advantage CP Resin	8.00
AMP-95	0.12
Dimethicone Copolymer	0.20
Ethanol (190P)	91.68
Fragrance	q.s.

Pump Hair Spray  
Super Hold

<u>Ingredients:</u>	<u>% by Wt</u>
Advantage CP Resin	12.00
AMP-95	0.19
Dimethicone Copolymer	0.20
Ethanol (190P)	87.61
Fragrance	q.s.

Formulations PF-0265 suggested by ISP

SOURCE: Angus Chemical Co.: Angus Product Formulary



Pump Setting Conditioning Mousse

Applicable to wet hair, normal hold, light conditioning effect, for all climatic zones.

<u>Ingredients:</u>	<u>% by Weight</u>
Luvimer 100 P	3.00
AMP-95	0.69
Cremophor A 25	0.20
Luviquat Mono CP	0.50
Perfume	q.s.
Preservative	q.s.
Water	95.61

Procedure:

Combine all ingredients and mix until homogeneous.  
Formulation PF-0307 from BASF

Setting Lotion

Applicable to wet hair, strong hold, for all climatic zones.

<u>Ingredients:</u>	<u>% by Weight</u>
Luvimer 100 P	6.00
AMP-95	1.39
Water	60.00
Ethanol	32.61
Perfume	q.s.

Procedure:

Combine Ethanol, AMP-95 and perfume. Add Luvimer 100 P to the solution and mix until clear.  
Formulation PF-0308 from BASF

80% VOC DME Aerosol Hair Spray

<u>Ingredients:</u>	<u>% by Weight</u>
Water	6.84
Ethanol	40.00
AMP-95	0.56
Acudyne 255 (41% solids)	12.50
Dimethylether (DME)	40.00
Dow Corning 190 Fluid	0.10

Procedure:

Mix water, ethanol, AMP-95 and plasticizer. Add polymer with stirring. Mix until solution is slightly turbid, but actives are dispersed. Charge DME. The mixture immediately turns clear.

Properties:

Cloud Point: <-22F

Vapor Pressure: 42 psig @ 70F

Formulation PF-0314 suggested by Rohm and Haas

SOURCE: Angus Chemical Co.: Angus Product Formulary

Pump Spray

Normal hold for all climatic zones, easy to comb and wash out.

<u>Ingredients:</u>	<u>% by Weight</u>
Ultrahold Strong	3.00
AMP Regular	0.60
Ethanol abs.	96.40
Perfume oil	q.s.

Procedure:

Place ethanol, AMP Regular and perfume oil in the mixing vessel, add Ultrahold Strong and stir until dissolved, then fill into containers.

Formulation PF-0332 suggested by BASF

Pump Spray

Strong hold for all climatic zones, easy to comb and wash out.

<u>Ingredients:</u>	<u>% by Weight</u>
Ultrahold Strong	5.00
AMP-95	0.80
Water, distilled	10.00
Ethanol abs.	84.20
Perfume oil	q.s.

Procedure:

Place ethanol, AMP-95, water and perfume oil in the mixing vessel, add Ultrahold Strong and stir until dissolved. Fill into containers.

Formulation PF-0333 suggested by BASF

Setting Foam

Firm dense foam for a normal hold.

<u>Ingredients:</u>	<u>% by Weight</u>
Ultrahold Strong	2.00
AMP-95	0.35
Cremophor A 25	0.20
Perfume oil + Cremophor RH 40 (1:3)	0.40
Water, distilled	87.05
Propane/butane	10.00

Procedure:

Place ethanol, AMP-95, Cremophor A 25 and water in the stirrer vessel. Add Ultrahold Strong and stir until dissolved. Fill into containers.

Formulation PF-0334 suggested by BASF

SOURCE: Angus Chemical Co.: Angus Product Formulary

Setting Conditioning Mousse  
Alcohol Free

<u>Ingredients:</u>	<u>% by Weight</u>
Resyn 28-2913	3.50
AMP-95	0.38
Crotein SPO	0.05
DC-1932 Surfactant	0.10
Tween 20	0.20
Monamid 150 ADD	0.20
Triton X-100	0.30
Deionized Water	85.27
Fragrance	q.s.
Preservative	q.s.
Propellant	10.00

Procedure:

Mix AMP-95 in water. Add Resyn 28-2913 slowly while maintaining good agitation. When solution is complete, add remaining ingredients in the concentrate. Filter and fill concentrate when uniform. Charge propellant.

Formulation PF-0177 suggested by National Starch and Chemical

Extra-Hold Conditioning Mousse

<u>Ingredients/Trade Name:</u>	<u>% by Weight</u>
Part A:	
Octylacrylamide/acrylates butylaminoethyl methacrylate copolymer (Amphomer)	3.75
AMP-95	0.60
Amodimethicone (and) nonoxynol-10 (and) tallowtrimonium chloride	0.40
Linoleamidopropyl PG dimonium chloride phosphate (Phospholipid EFA)	0.60
SD Alcohol 3A	10.00
Water	37.35
Part B:	
Hydroxyethyl cellulose	0.30
Water	37.00
Part C:	
Propellant	10.00

Procedure:

Prepare A and B separately. To prepare B, carefully sprinkle hydroxyethyl cellulose into water with good agitation. Heat may be applied to help solubilization. Blend B in A, pressurize with C.

Formulation PF-0180 suggested by Mona Industries

SOURCE: Angus Chemical Co.: Angus product Formulary

**Setting-Conditioning Mousse**  
**Aqueous-Alcoholic**

<u>Ingredients:</u>	<u>% by Weight</u>
Resyn 28-2913	3.00
AMP-95	0.33
Crotein SPO	0.10
DC-1932 Surfactant	0.10
Tween 20	0.20
Monamid 150 ADD	0.20
Glycerine	0.10
Triton A-100	0.50
Anhydrous Ethanol	20.00
Deionized Water	65.47
Fragrance	q.s.
Preservative	q.s.
Propellant	10.00

**Procedure:**

Mix AMP-95 in water. Add Resyn 28-2913 slowly while maintaining good agitation. When solution is complete, add remaining ingredients in the concentrate. Filter and fill concentrate when uniform. Charge propellant.

Formulation PF-0176 suggested by National Starch and Chemical

**Styling Mousse**

<u>Ingredients:</u>	<u>% by Weight</u>
AMP-95	0.20
Gantrez ES-225	5.00
Anhydrous ethanol	10.00
Dow Corning 193	0.50
Water	74.30
Perfume, preservative	q.s.
Propellant S-46	10.00

**Procedure:**

Add AMP-95 to anhydrous ethanol, then stir in Gantrez ES-225. In a separate container add Dow Corning 193 to water. Stir the mixture containing Gantrez ES-225 into the water containing Dow Corning 193. Add perfume and preservative. Charge concentrate (90% by weight) into can and pressurize with propellant A-46 (10% by weight).

Formulation PF-0175 suggested by ISP

SOURCE: Angus Chemical Co.: Angus Product Formulary

Setting Lotion, Clear, In Gel Form

	<u>%W/W</u>
Nasuna B*)	4.0
Carbopol 940	0.7
Ethyl/isopropyl alcohol	50.1
Triethanolamine	1.0
Water	44.2
Preparation: Nasuna is dissolved in alcohol, water is added and Carbopol 940 is then stirred in. When Carbopol 940 is uniformly dispersed, the solution is neutralized with triethanolamine and then perfumed.	
Formula No. WB11-01	

Setting Lotion, Clear, In Gel Form

	<u>%W/W</u>
I Ethyl/isopropyl alcohol	45.0
Nasuna B *)	3.0
II Water	45.2
III Carbopol 940	0.8
IV Water	5.0
Triethanolamine	1.0
Formula No. WB11-03	

Setting Lotion, Clear, Liquid

	<u>%W/W</u>
Nasuna B *)	1.5
Ethyl/isopropyl alcohol	50.0
Dehyquart A	0.5
Water	48.0
Formula No. WB 51-02	

Setting Lotion, Clear, Liquid

	<u>%W/W</u>
Luviskol VA 64	2.0
Dehyquart C cryst.	0.1
Water	97.9
Formula No. WB51-04	

Conditioning Setting Lotion, Clear

	<u>%W/W</u>
Nasuna B *)	2.00
Dehyquart SP	0.25
Ethyl/isopropyl alcohol	50.00
Water	47.75
Formula No. WB51-05	

Conditioning Setting Lotion, Clear

	<u>%W/W</u>
Nasuna B *)	2.0
Polyquart H81	2.0
Water	96.0
Formula No. WB51-06	

Note: \*)The Nasuna types are not for sale in West Germany. Various PVP/VA types on the market can be referred to.

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Setting Lotion, Foam, Aerosol-Packed

	<u>%W/W</u>
I Lanette O	1.5
Eumulgin B1	1.5
Cetiol V	3.0
II Dehyquart C cryst.	0.1
Luviskol VA 64	4.0
Water	89.9

Note: Filling: 92 parts emulsion  
                     8 parts propellant 12/114 (40:60)  
             Foam nozzle

Shake aerosol before use!

Formula No. WB71-01

Setting Lotion, Foam, Aerosol-Packed

	<u>%W/W</u>
Nasuna B *)	2.0
Dehyquart SP	0.6
Cetiol HE	1.0
Water	96.4

Note: Filling: 92 parts solution  
                     8 parts propellant 12/114 (40:60)  
             Foam nozzle

Shake aerosol before use!

Formula No. WB71-03

Setting Lotion, Foam, Aerosol-Packed

	<u>%W/W</u>
Nasuna B *)	2.0
Polyquart H	2.0
Water	96.0

Note: Filling: 92 parts product  
                     8 parts propellant 12/114 (40:60)  
             Foam nozzle

Shake aerosol before use!

Formula No. WB71-04

Setting Lotion, Extra Strong, Aerosol-Packed

	<u>%W/W</u>
Nasuna B *)	8.0
Eumulgin RO 40	0.2
Comperlan COD	0.2
Ethanol	10.0
Water	81.6

Note: Filling: 92 parts product  
                     8 parts propellant, Frigen 12

Valve: Vertical valve and foam nozzle

Formula No. WB 71-06

Note:

\*) The Nasuna types are not for sale in West Germany. Various PVP/VA types on the market can be referred to.

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Setting Mousse

Applicable to wet hair, strong hold, for all climatic zones.

<u>Ingredients:</u>	<u>% by Weight</u>
Luvimer 100 P	5.00
AMP-95	1.16
Cremophor A 25	0.20
Perfume	q.s.
Water	83.64
Preservative	q.s.
Propane/Butane	10.00

Procedure:

Combine all ingredients and mix until homogeneous.

Formulation PF-0304 from BASF

Setting Conditioning Mousse

Applicable to wet hair, strong hold, for conditioning effect, improves the wet combability, gives body to the hair, prevents "flyaway" effect.

<u>Ingredients:</u>	<u>% by Weight</u>
Luvimer 100 P	3.00
AMP-95	0.69
Luviquat FC370	2.50
Cremophor A 25	0.20
Luviquat Mono CP	0.50
Perfume/Cremophor RD 40 1:3	q.s.
Preservative	q.s.
Water	83.11
Propane/Butane	10.00

Procedure:

Combine all ingredients and mix until homogeneous.

Formulation PF-0306 from BASF

Pump Setting Mousse

Applicable to wet hair, normal hold, for all climatic zones.

<u>Ingredients:</u>	<u>% by Weight</u>
Luvimer 100 P	3.00
AMP-95	0.69
Perfume	q.s.
Preservative	q.s.
Water	96.11

Procedure:

Combine all ingredients and mix until homogeneous.

Formulation PF-0305 from BASF

SOURCE: Angus Chemical Co.; Angus Product Formulary

Shine N' Set--Styling & Moisturizing Spray

	<u>%W/W</u>
PVP	1.00
Gafquat 755N (Polyquaternium 11)	3.00
Barquat CT-429 (Cetrimonium Chloride)	1.00
Quat-Pro E (Triethonium Hydrolyzed Collagen Ethosulfate)	3.00
Kera-Tein 1000 (Hydrolyzed Keratin Protein)	0.50
Glycerin	10.00
Propylene Glycol	10.00
Glydant (DMDM Hydantoin)	0.20
Aqua-Tein S (Acetamide MEA (and) MEA-Hydrolyzed Silk (and) Propylene Glycol)	0.50
Deionized Water	69.30
Fragrance	q.s.
Tween 20	1.50

**Procedure:**

Dissolve the PVP in hot water. Add the rest of the ingredients, except fragrance and Tween. Pre-dissolve the fragrance in the Tween, and add to the batch below 40C.

**Properties:**

This formula contains an effective combination of styling resins, combing aids and hair softening and shining agents. In addition, Quat-Pro E serves to moisturize and build body in the hair. The cationic nature and film forming properties of this substantive protein will protect the hair. Kera-Tein 1000 and Aqua-Tein S will condition and add highlights. In addition, Aqua-Tein S will penetrate the hair cuticle to bring moisture to where it is needed most. Note: This system is suitable for dispensing from a Mistette pump.

SOURCE: Maybrook Inc.: Formula #HE-1902



**Silk and Soy Styling/Blow Drying Conditioner**

	<b>%W/W</b>
A. Flexan 130 (Sodium Polystyrene Sulfate)	2.00
Soy-Tein NL (Hydrolyzed Soy Protein)	2.00
Silk Pro-Tein (Hydrolyzed Silk)	0.50
Deionized Water	89.70
Glydant (DMDM Hydantion)	0.30
B. Methyl Paraben	0.20
dl-Panthenol	0.10
Isopropyl Alcohol	5.00
Fragrance	q.s.
Tween 20 (Polysorbate 20)	0.20

**Procedure:**

Mix Phase A and B separately. Add Phase B to Phase A. Mix.

**Properties:**

In this formula, natural Silk and Soy proteins moisturize and beautify the hair. Flexan 130, a high molecular weight polymer, is the primary setting agent. Its use level can be varied depending on the control desired. Films are hard and moisture resistant yet water soluble. Excellent wet combing and a natural, glossy look are an added benefit of using this product.

Formula #HF-1201

**Moisturizing Styling Spray**

	<b>%W/W</b>
A. Alcohol SDA-40	15.00
PVP/VA E-535 (PVP/VA Copolymer)	4.00
Lantrol AWS 1692 (PPG-12 PEG-65 Lanolin Oil)	2.00
Fragrance	0.10
B. Deionized Water	61.60
Glycerin	10.00
Kera-Tein 1000 AS (Ethyl Ester of Hydrolyzed Keratin)	3.00
Aqua-Tein C (Collagen Amino Acids (and) Acetamide MEA (and) Propylene Glycol)	3.00
Cetrimonium Chloride	1.00
DMDM Hydantoin	0.30

**Procedure:**

Pre-mix Phase A and Phase B separately. Mix the two phases together.

**Properties:**

This styling spray has been designed to provide softness along with sufficient styling and bodying characteristics to achieve the "Modern Upswept Look". Shine and moisturization are provided by the Aqua-Tein C, Kera-Tein 1000 AS and glycerin. Improved body and flexibility will also result. Aqua-Tein C penetrates to where it's needed most, resulting in an improved condition of the hair.

Formula #HE-1903

**SOURCE:** Maybrook Inc.: Suggested Formulations

Silky Soft Conditioner for Bodied Hair

	<u>%W/W</u>
A. Deionized Water	78.00
Collagen Hydrolyzate Cosmetic N-55 (Hydrolyzed Collagen)	6.00
Carsquat SDO-85 (Stearalkonium Chloride)	4.00
Polquaternium-11	0.40
Panthenol	0.10
Methylparaben	0.20
Propylparaben	0.10
Quat-Pro S (Stearyltrimonium Hydroxy Ethyl Hydrolyzed Collagen)	0.50
Silk Pro-Tein (Hydrolyzed Silk)	0.50
B. Laneth-15	2.50
Cetyl Alcohol	7.00
C. Proto-Lan 8*	0.50
Fragrance	0.20
Color	q.s.
*(Lecithin (and) Butyl Stearate (and) Cocoyl Hydrolyzed Collagen (and) Oleoyl Sarcosine (and) Sesame Oil (and) Lanolin Alcohol)	

**Procedure:**

Heat Phase A and B separately to 80C. Add A to B at 80C. Mix and cool to 60C. Add the Proto-Lan 8. Mix and cool to 50C. Add the fragrance. Mix to incorporate.

**Properties:**

Provides maximum conditioning for damaged, dry hair. Contains substantive silk and collagen proteins to smooth and protect the hair shaft. Proto-Lan 8 adds essential fatty acids phospholipids and lipo-proteins to replenish and rejuvenate the hair. Improves texture, bodies the hair. Good wet and dry combing.

SOURCE: Maybrook Inc.; Formulation #HC-502

Spray Leave-On Conditioner

	<u>Weight, %</u>
Mackpro Conditioner*	0.5
Mackalene 426	3.0
Paragon Preservative	qs
Water, Dye, Fragrance qs to	100.0
*Based on 100% concentration.	

**Procedure:**

1. Add components to water.
2. Heat to 40C and blend until clear.

SOURCE: McIntyre Group Ltd.; Suggested Formulation

Simply Hair

	<u>%W/W</u>
A. Deionized Water	90.00
Collagen Hydrolyzate Cosmetic N55 (Hydrolyzed Collagen)	3.00
Gafquat HS-100 (Polyquaternium-28)	1.00
B. Glyceryl Stearate SE	1.00
Maywax D (Cetearyl Alcohol (and) Ceteareth-20)	5.00
C. Fragrance, preservatives	q.s.

**Procedure:**

Heat Phases A&B to 80C. Add B to A. Mix and cool to 40C. Add C.

**Properties:**

A simple, easy-to-make hair conditioner with good all-around properties. Aids in combing. Adds body, manageability and improves the condition of the hair. The collagen protein can be substituted with other proteins such as keratin, wheat, soy or quaternaries depending on market targeted.

SOURCE: Maybrook Inc.: Formula #HC-509

Styling Mousse

	<u>Weight, %</u>
PVP/VA E335	4.5
SDA 40 Alcohol	1.5
Mackpro Conditioner*	1.0
Deionized Water, Fragrance, Dye qs to	100.0

**Procedure:**

1. Combine components and blend until clear.
2. Pressurize with suitable propellant.

\*Based on 100% concentration.

SOURCE: McIntyre Group Ltd.: Suggested Formulation

**Simply Wheat Non-Aerosol Hair Spray**

<u>Ingredients:</u>	<u>% by Weight</u>
Part A:	
Alcohol SD-40	60.0
Resyn 29-2930	3.0
Procetyl 10 (PPG-10 Cetyl Ether)	0.8
AMP Regular (Amino Methyl Propanol)	0.4
Part B:	
Deionized Water	35.6
Crotein ADW (AMP Isostearoyl Hydrolyzed Wheat Protein)	0.2

**Procedure:**

Add the AMP of Part A to the alcohol with mixing. When uniform, add the Resyn 28-2930 with mixing. When uniform, add Procetyl 10. Separately mix the ingredients of Part B, then add to Part A with mixing.

Formulation PF-0201 suggested by Croda

**80% VOC Aerosol Hairspray Formulation**  
**Extra Hold**

<u>Ingredients:</u>	<u>% by Weight</u>
Gantrez V-225 Resin	7.00
AMP-95	0.32
SD Alcohol 40	46.50
Distilled Water	16.18
Propellant A-17	9.00
Dimethyl Ether Propellant	21.00
Plasticizer	q.s.
Fragrance	q.s.

Formulation PF-0202 suggested by International Specialty Products

**80% VOC Aerosol Hairspray Formulation**  
**Super Hold**

<u>Ingredients:</u>	<u>% by Weight</u>
Gantrez V-425 Resin	8.00
AMP-95	0.32
SD Alcohol 40	46.00
Distilled Water	15.68
Propellant A-17	9.00
Dimethyl Ether Propellant	21.00
Plasticizer	q.s.
Fragrance	q.s.

Formulation PF-0203 suggested by International Specialty Products

SOURCE: Angus Chemical Co.: Angus Product Formulary

**Smooth and Shine Keratin Hair Conditioner**

	<u>%W/W</u>
A. Mineral Oil, Light	5.00
Isopropyl Palmitate	1.00
Maywax P (Emulsifying Wax, NF)	12.00
Glyceryl Monostearate, Pure	0.50
B. PEG-40 Stearate	0.30
Panthenol	0.30
Lipo-Peptide AME-30 (Acetamide MEA and Lauroyl	
Hydrolyzed Collagen and Glycerin)	3.00
Methyl Paraben	0.20
Ammonyx 4 (Stearalkonium Chloride)	1.00
Deionized Water	75.60
Kera-Tein 1000 SD (Hydrolyzed Keratin)	0.50
C. Quaternium-15	0.20
Fragrance	0.20

**Procedure:**

Mix and heat Phase A and B separately to 80C. Add B to A.  
Mix and cool to 50C. Add Phase C.

**Properties:**

A leave-in hair conditioner which gives the hair a silk-soft and luxurious feel. Excellent combing aid. Massage a small amount into the hair and especially into damaged ends.

**SOURCE:** Maybrook Inc.: Formula #HC-512

**Pearly Lotion Conditioner**

	<u>Weight, %</u>
Mackalene 316	7.0
PEG 400 Distearate	0.5
Sodium Sulfate	0.5
Propylene Glycol	2.0
Mackstat DM	q.s.
Water, Dye, Fragrance qs to	100.0

**Procedure:**

1. Add first four components to water and heat to 65C.
2. With mild agitation cool to 50C. and add remaining components.
3. Cool and fill.

**SOURCE:** McIntyre Group Ltd.: Suggested Formulation

Soy Hydrating Hair Therapie

	<u>%W/W</u>
A. Deionized Water	91.30
Natrosol 250HR (Hydroxyethylcellulose)	0.50
B. Soy-Tein NL (Hydrolyzed Soy Protein)	3.00
Carsoquat CT 429 (Cetrimonium Chloride)	2.00
C. Soy-Quat C (Cocodimonium Hydroxypropyl Hydrolyzed Soy Protein)	1.00
Solulan 98 (Polysorbate 80 and Cetyl Acetate and Acetylated Lanolin Alcohol)	2.00
Fragrance	0.20
Preservative	q.s.

Procedure:

Heat water and Natrosol to 70C. Mix and cool until product is thickened and clear. Add phase B. Mixture will haze slightly. Pre-mix phase C and add to batch. This will clear the product.

Properties:

A Soy-based hair hydrating and softening therapy for badly damaged hair.

Usage:

May be used before or after shampooing. If used before shampooing, no need to rinse out prior to lathering hair. If used after shampooing, rinse shampoo out. Treat hair. Rinse clear. For added conditioning, Soy Quat C and Solulan 98 amounts may be raised proportionately.

SOURCE: Maybrook Inc.: Formula #HE-01805

Foaming Conditioner

	<u>Weight, %</u>
Mackam 35	10.0
Mackalene 116	15.0
Mackpro Conditioner*	2.5
Hydroxyethylcellulose	0.7
Mackstat DM	qs
Water, Dye, Fragrance qs to	100.0

Procedure:

1. Thoroughly disperse the Hydroxyethylcellulose in water and heat to 45C.
2. Add Mackam 35, Mackalene 116 and Mackpro conditioner.
3. Blend until clear.
4. Add Mackstat DM, fragrance and dye.
5. Cool and fill.

\*Based on 100% concentration.

SOURCE: McIntyre Group Ltd.: Suggested Formulation

Soy Infused Hair Treatment

	<u>%W/W</u>
A. Panthenol	0.10
Methyl Paraben	0.20
Fragrance	0.20
Polysorbate 80	0.50
SD Alcohol 40A	2.00
Dowanol DPM (PPG-2 Methyl Ether)	1.00
Soy-Quat C	
(Cocodimonium Hydroxypropyl Hydrolyzed Soy Protein)	0.50
B. Deionized Water	87.80
Gafquat 755N (Polyquaternium-11)	1.00
Soy-Tein NL (Hydrolyzed Soy Protein)	3.00
Dowicil 200 (Quaternium-15)	0.20
Amersil DMC-357 (Dimethicone Copolyol)	0.50
C. Dow Corning 929 Emulsion (Amodimethicone and Tallowtrimonium Chloride and Nonoxynol-10)	3.00

**Procedure:**

Pre-mix Phase A. Add water from Phase B to Phase A. Add the rest of the (B) ingredients with mixing. Add Phase C (mixture will be milky.)

**Properties:**

A leave-in conditioner/detangler with vegetable proteins for adding body and shine to the hair. Makes fine, limp hair feel thicker, more manageable. The Soy-Tein NL, a substantive vegetable protein, adds body and manageability. Soy-Quat is a cationic soy derivative which adds shine and combability to this product.

SOURCE: Maybrook Inc.: Formulation #HC-513

Mild Pearl Conditioner

	<u>Weight, %</u>
Mackalene 326	7.0
PEG 400 Distearate	0.5
Sodium Chloride	0.5
Mackstat DM	q.s.
Water, Dye, Fragrance qs to	100.0

**Procedure:**

1. Add the first three components to water and heat to 65C.
2. With continuous stirring, cool to 40C. and add dye, Mackstat DM and fragrance.
3. Cool and fill.

SOURCE: McIntyre Group Ltd.: Suggested Formulation

Spray Gel

<u>Ingredients:</u>	<u>Weight%</u>	<u>Function</u>
Part A:		
Carbopol 980 (1) (1% dispersion)	30.00	Gelling Agent
Part B:		
Deionized Water	59.17	Diluent
PVP/VA Copolymer (2)	8.00	Hair Setting Resin
Triethanolamine (99%)	0.12	Neutralizer
Disodium EDTA	0.01	Chelating Agent
Part C:		
Glycerin	2.00	Humectant
Polysorbate 20 (3)	0.50	Lubricant/ Fragrance
Methylparaben	0.20	Preservative
(1) Carbomer (BFGoodrich Co.)		
(2) Luviskol VA-73W (BASF)		
(3) Tween 20 (ICI Americas, Inc.), Protasorb L-20 (Protameen), or Nikkol TL-10 (Nikko)		

Procedure:

1. Prepare 1% Carbopol 980 dispersion in room temperature deionized water.
2. Mix Part B ingredients until all ingredients dissolve.
3. Add Part B to Part A with moderate agitation.
4. Mix Part C ingredients with slight heating until paraben is dissolved.
5. Add Part C to Parts A and B.
6. Add a small additional amount of TEA until gel is clear.

Properties:

pH: 5.60 to 5.80  
 Viscosity (cps) @ 25C: 4,500 to 8,000  
 Viscosity (cps) @ 50C (day 60): 4,500 to 8,000  
 Clarity (%T): 92.0 to 95.0

Special Instructions:

In this formulation, a PVP/VA (70:30) copolymer in aqueous solution is required to maintain optimum clarity at up to 4% resin solids. Additionally, the best clarity will be seen when the pH is maintained between 5.55 and 5.80. Special care should be taken to not exceed this pH.

Additional hold can be obtained by the addition of PVP K90 (BASF) at 0.5% to Part B without a reduction of gel clarity.

Comments:

This clear gel has excellent pump spray quality, with moderate hold and little tack on hair under humid conditions. Carbopol 980 gives a very clear gel structure to suspend air bubbles, yet thins when pumped thorough sprayer to give a fine mist.

Note:

Recommended pump sprayer is: Calmar Mark IV high pressure, 1.5 lb. precompression spring, WH orifice (Calmar, Inc.)

SOURCE: BF Goodrich Co.: Formulation C0040



Styling Gel with Shellac

<u>Ingredients:</u>	<u>% by Weight</u>
A Carbopol 1382	1.00
Demineralized water	52.30
Phenonip	0.50
B Tris Amino	1.20
C Ethanol	42.00
Shellac Wax MHP105 DO	3.00

Procedure:

Disperse Carbopol 1382 in demineralized water containing Phenonip, according to the procedure suggested by BF Goodrich (430-I). Carbopol 1382 can also be dispersed using a rotor-stator at high turbulence. Foam formation may then occur; this foam can be eliminated using a small amount of a strong inorganic acid (20 ppm).

Neutralize with Tris Amino. As soon as a clear gel is obtained, 50% of the Ethanol is added to obtain a hydro-alcoholic gel of Carbopol 1382.

Shellac is dissolved in the remainder Ethanol. When the shellac is completely dissolved, the solution is gradually added to the hydro-alcoholic gel while gently stirring with an anchor mixer.

To remove most of the entrapped air, the gel is slowly stirred for 30 minutes. Finally the hydro-alcoholic Shellac gel is transferred to a suitable bottle.

Important Note: Attention needs to be given to the Shellac solution; the speed of dissolution is low. The Shellac solution is best prepared while boiling Shellac under reflux with Ethanol, or to dissolve Shellac in Ethanol and to age the solution overnight.

Formulation PF-0337 suggested by BF Goodrich

High Solids 55% VOC Pump Spray

<u>Ingredients:</u>	<u>% by Weight</u>
Lovocryl 47	8.00
AMP-95	1.38
Citroflex-2	0.22
Monamid 716	0.20
Anhydrous Ethanol, SDA-40	55.00
Deionized Water	35.20
Fragrance	q.s.
Preservative	q.s.

Procedure:

Dissolve AMP-95 in water and ethanol. While maintaining good agitation, slowly sift in Lovocryl 47. When dissolved, add remaining ingredients and mix until homogeneous.

Valve: Seaquist EuroMist II 160 output with a 0.016" x 0.010" Shallow actuator.

Formulation PF-0267 suggested by National Starch & Chemical Co.

SOURCE: Angus Chemical Co.; Angus Product Formulary

Styling Mousse

Eastman AQ 55S water-dispersible polyester is the fixative in these conditioning mousse formulas. Eastman AQ 55S polymer offers excellent curl retention, humidity resistance, and sheen for hair. Myvatex Texture Lite emulsifier and Myvatex 60 emulsifier provide a stable hair conditioning base for both hydroalcoholic and alcohol-free formulas. Levels of Eastman AQ 55S and Myvatex Texture Lite can be adjusted to modify levels of hold and conditioning. These mild, nonionic, soap-free formulas are suitable for all hair types.

Formulation X22176-106 (Hydroalcoholic)

<u>Concentrate:</u>	<u>%W/W</u>
Distilled water	q.s.* to 100
Eastman AQ 55S polymer	8.0
Myvatex Texture Lite emulsifier	2.0
Monamid 150 ADD	1.0
Myvatex 60 emulsifier	0.3
SDA-40C alcohol	20.0
Fragrance	q.s.*
Citric acid	q.s.*

\*q.s.=quantity sufficient

Procedure:

1. Heat Eastman AQ 55S and water to 80-85C with mixing until the polymer is completely dispersed in the water.
2. Cool to room temperature.
3. Slowly add Myvatex Texture Lite with high-speed agitation. Care should be taken when mixing to avoid aeration.
4. When uniform, add Myvatex 60 and Monamid 150 ADD.
5. Slowly add SDA-40C alcohol.
6. Add fragrance.
7. Adjust pH to 6.5-7.0 with citric acid.
8. Aerosol final concentrate at 5.23 g/mL of A46 propellant (Aeropress).

Formulation X22176-107 (Alcohol-Free)

<u>Concentrate:</u>	<u>%W/W</u>
Distilled water	q.s.* to 100
Eastman AQ 55S polymer	8.0
Myvatex Texture Lite emulsifier	5.5
Monamid 150 ADD	1.0
Myvatex 60 emulsifier	0.3
Preservative	q.s.*
Fragrance	q.s.*
Citric acid	q.s.*

\*q.s.=quantity sufficient

Procedure:

1. Heat Eastman AQ 55S and water to 80-85C with mixing until the polymer is completely dispersed in the water.
2. Cool to room temperature and add preservative.
3. Slowly add Myvatex Texture Lite with high-speed agitation. Care should be taken when mixing to avoid aeration.
4. When uniform, add Myvatex 60 and Monamid 150 ADD.
5. Add fragrance. 6. Adjust pH to 6.5-7.0 with citric acid.
6. Aerosol final concentrate at 5.23 g/mL of A46 propellant (Aeropress).

SOURCE: Eastman Chemical Co.: Suggested Formulations

Super-Hold Hair Spray

<u>Ingredients:</u>	<u>% by Weight</u>
SDA 40 Alcohol (190 Proof)	82.43
Stepanhold R-1	12.00
Deionized Water	5.00
AMP-95	0.37
Perfume	0.20

Procedure:

Dissolve the Stepanhold R-1 in alcohol and add the AMP; mix well. Add the deionized water and perfume; mix until the product is clear.

Formulation PF-0102 suggested by Stepan Chemical Co.

Aerosol Hair Spray

<u>Ingredients:</u>	<u>% by Weight</u>
Gantrez ES-225 or ES-425	4.00
AMP-Regular	0.09
Arosurf 66-E2	0.10
Isopropyl Lanolate	0.05
Fragrance	0.10
Ethanol, SDA Anhydrous	45.66
Propellant	50.00

Procedure:

Dissolve the neutralizer (AMP) in the alcohol and add the Gantrez resin. When the resin is in solution, add the remaining ingredients in the order listed.

Formulation PF-0103 suggested by the Sherex Chemical Co.

Hairspray  
(Mechanically Actuated)

<u>Ingredients:</u>	<u>% by Weight</u>
Resyn 18-2930	4.50
AMP-95	0.36
Emcol CC-9	0.15
Fragrance	q.s.
Ethanol (190 proof SDA-40)	94.99

Valve: Calmar M-2

Formulation PF-0117 suggested by National Starch & Chemical Corp.

SOURCE: Angus Chemical Co.: Angus Product Formulary

**Ultra Rich Conditioner**  
(Formula 90-0303M)

	<u>% by Weight</u>
Rhodaquat M270C/18	3.50
Cetyl Alcohol NF	1.50
Alkamuls EGMS/C	1.00
Jaguar HP-60	0.80
Citric Acid	Q.S.
Fragrance, Dye(s), Preservative	Q.S.
Water	93.20

**Blending Procedure:** Disperse Jaguar HP-60 in water and mix until uniform. Warm water system to 70-75C and blend in Rhodaquat M270C/18, Cetyl Alcohol NF, and Alkamuls EGMS. Once system is uniform, adjust formulation pH to 3.5-4.5 with Citric Acid as needed. With smooth agitation, cool system to 40-45C and blend in compatible Fragrance, Dye(s) and Preservative.

**Typical Formulation Properties**

Appearance @ 25C:	Opaque/Pearlescent Liquid
pH:	3.5-4.5
% Non Volatiles:	4-5

**CTFA Identification:** Water, Cetyl Alcohol, Glycol Stearate, Stearalkonium Chloride, Hydroxypropyl Guar, Fragrance, Preservative, Citric Acid, Dye(s).

**Hair Relaxer**  
(Formula 92-1205)

	<u>% by Weight</u>
Miranol DM Conc. (45%)	15.0
Sodium Hydroxide (50%)	8.0
Mineral Oil	5.0
Alkamuls EGDS	3.0
Cetyl Alcohol NF	1.0
Deionized Water	68.0
Preservative, Dyes	q.s.

**Procedure:** Heat all ingredients (except sodium hydroxide) with mixing to 75C until uniform. Continue mixing and cool to 45C, then add sodium hydroxide. Continue mixing until uniform. Add compatible preservative and dye.

**Typical Formulation Properties:**

Appearance @ 25C:	Viscous, opaque liquid
Viscosity @ 25C:	8,000-10,000 cps
pH:	9-11
% Non Volatiles:	20

**CTFA Identification:** Water, Stearoamphoacetate, Mineral Oil, Sodium Hydroxide, Glycol Stearate, Cetyl Alcohol, Preservative, Dyes.

**SOURCE:** Rhone-Poulenc Surfactants & Specialties: Formulas

Vegetable Creme Hair Dressing

	<u>%W/W</u>
A. Deionized Water	44.70
Carbopol 940-2% Aq. Sol'n. (Carbomer 940)	35.00
Wheat-Tein NL (Hydrolyzed Wheat Protein)	3.00
Tween 20 (Polysorbate 20)	1.50
B. Mayphos OL 3N (DEA-Oleth-3 Phosphate)	0.30
Arlacel 60 (Sorbitan Stearate)	1.50
Petrolatum	2.00
Wheat Germ Oil	2.00
Sesame Oil	3.00
Cetyl Alcohol	1.00
Arlacel 165 (Glyceryl Stearate (and) PEG-100 Stearate)	1.00
Isopropyl Palmitate	3.00
Shea Butter	1.00
C. Triethanolamine-99%	1.00
Preservatives, Fragrance	q.s.

**Procedure:**

Heat Phases A & B separately to 80C. Add Phase B to A at 80C with agitation. Mix until smooth. Add phase C carefully to avoid aeration.

**Properties:**

A creme hair dressing based on natural vegetable oils and proteins. Conditions and moisturizes leaving a smooth finish and natural shine. Reduces split ends and dryness without leaving a greasy feel. Wheat-Tein NL protects and repairs the hair. Mayphos OL 3N acts as an adjunct emulsifier and adds an attractive shine. Excellent for setting, pressing, blow drying and conditioning. Massage a small amount into the hair and especially into the ends.

SOURCE: Maybrook Inc.: Formula #HE-1651

Clear Conditioner

	<u>Weight, %</u>
Mackpro Conditioner*	2.0
Hydroxyethylcellulose	1.0
Mackstat DM	qs
Water, Fragrance, Dye qs to	100.0

**Procedure:**

1. Completely disperse Hydroxyethylcellulose in water.
2. Heat to 45C and add Mackpro conditioner.
3. Adjust pH to 5.0 with lactic acid.
4. When product is clear, add remaining components.
5. Cool and fill.

\*Based on 100% concentration

SOURCE: McIntyre Group Ltd.: Suggested Formulation

Water-Based Hair Sprays

These formulations demonstrate a dual-resin approach to alcohol-free hair spray systems which utilize the quick-setting benefits of Eastman AQ polymer to achieve comparable performance with traditional alcohol products. The combination of Eastman AQ water-dispersible polyesters and conventional water-soluble resins provides performance improvements over single component systems. This technology provides formulation flexibility to optimize performance in rinseability/washability, degree of hold, humidity resistance, film elasticity, and viscosity control for spray pattern.

Formulation X21980-057 (Pump)

Phase A:	%W/W
Distilled water	90.4
Eastman AQ 55S polymer	5.0
Phase B:	
Germall II diazolidinyl urea	0.3
Methylparaben	0.3
Phase C:	
Luviskol VA 73W PVP/VA copolymer-50% solids	4.0
Procedure:	
1. Heat Phase A to 85C.	
2. With mixing, hold at 80-85C for 15 minutes.	
3. Cool to 60C, add Phase B, and mix until dissolved.	
4. Cool to 40C and add Phase C.	
5. Add water lost during heating.	
6. Mix until uniform; filter and package.	
pH: 6.0+-1.0	

Formulation X21980-058 (Aerosol)

Phase A:	%W/W
Distilled water	60.4
Eastman AQ 38S polymer	5.0
Phase B:	
Germall II diazolidinyl urea	0.3
Methylparaben	0.3
Phase C:	
Luviskol VA 73W PVP/VA copolymer-50% solids	4.0
Phase D:	
Dymel A dimethyl ether	30.0
Procedure:	
1. Heat Phase A to 85C.	
2. With mixing, hold at 80-85C for 15 minutes.	
3. Cool to 60C, add Phase B, and mix until dissolved.	
4. Cool to 40C and add Phase C.	
5. Add water lost during heating.	
6. Add Phase D at room temperature.	
7. Mix until uniform; filter and package.	
8. Agitate aerosol container to ensure solution of propellant.	
pH: 6.0+-1.0	

SOURCE: Eastman Chemical Co.: Suggested Formulations

**Water-Based Pump Hair Spray**

Water-based spray provides clear glossy film and strong hold on hair. Fixative polymer requires no neutralization; has low viscosity for effective spray pattern and better dry time.

<u>Ingredients:</u>	<u>% by Weight</u>
Part A:	
Deionized Water	91.50
Part B:	
Dimethicone copolyol	0.30
Laurylamine DEA (Monamide 716)	0.30
AMP-Acrylates Copolymer (Diahold A-503)	7.00
Glycerin	0.20
Propylene Glycol	0.40
Fragrance	0.10
Preservative	0.20

**Procedure:**

Add A to vessel. Add B in order with mixing. Adjust pH to 6.5.

Formulation PF-0250 suggested by Sandoz

**Hair Spritzing Spray, Non-Aerosol**

<u>Ingredients:</u>	<u>% by Weight</u>
Crovol M40 (corn oil PEG-20 complex)	0.50
AMP-95	0.16
Ethanol DEB 100	to 100
Gantrez ES425 (PVM/MA copolymer)	8.00
Escalol 507 (octyl dimethyl PABA)	1.00
Water, deionized	11.36
d-Panthenol	0.10
Perfume, preservatives, color	q.s.

**Procedure:**

Dissolve the AMP-95 in the alcohol. Add the Gantrez ES resin with mixing. Mix in the Escalol, then Crovol. Premix the water and Panthenol then add the alcohol. Mix until clear.

Formulation PF-0249E

SOURCE: Angus Chemical Co.: Angus Product Formulary

Wet Gel, Alcohol-Free

	%W/W
I Eumulgin HRE 60	1.0
Perfume	0.5
II Water	55.0
Carbopol 940	0.8
III Water	5.0
Triethanolamine	1.5
IV Nasuna B	0.5
Water	35.7

Preparation: Carbopol 940 is sprinkled into the alcohol/water mixture stirring continuously, and allowed to swell. Later it is neutralized with the triethanolamine dissolved in 5 parts water.

Nasuna B is dissolved in the remaining water, stirring continuously. This solution is added to the swollen Carbopol. Eumulgin SML 20 and perfume are mixed together and then mixed with a small quantity of the above gel before being mixed with the remaining gel.

Formula No. WF11-27

Wet Gel

	%W/W
Ethyl alcohol 96%	41.0
Water	51.9
Carbopol 940	0.8
Triethanolamine	1.0
Eumulgin SML 20	5.0
Perfume	0.3

Preparation: See Formula WF11-27

Formula No. WF11-30

Setting Lotion, Clear, in Gel Form

	%W/W
Nasuna B	4.0
Carbopol 940	0.7
Ethyl/isopropyl alcohol	50.1
Triethanolamine	1.0
Water	44.2

Preparation: See Formula WF11-27

Formula No. WF 11-32

Hair Oil

	%W/W
Paraffin oil	60.0
Cetiol V	30.0
Isopropyl myristate	10.0

Formula No. WF31-01

Hair Oil

	%W/W
Paraffin oil	90.0
Cetiol B	10.0

Formula No. WF31-02

SOURCE: Henkel KGaA: Cosmetic Model Formulae



**Wet Gel with Glitter Effect, Contains Alcohol**

	%W/W
I Water	20.0
Ethyl alcohol 96%	41.0
Carbopol 940	0.7
II Water	5.0
Triethanolamine	1.0
III Water	25.0
Nasuna B	1.0
IV Eumulgin SML 20	5.0
Perfume	0.3
V Polyester glitter blue 25/105R	1.0

Preparation: Carbopol 940 is sprinkled into the alcohol/water mixture stirring continuously, and allowed to swell. Later it is neutralized with the triethanolamine dissolved in 5 parts water.

Nasuna B is dissolved in the remaining water, stirring continuously. This solution is added to the swollen Carbopol.

Eumulgin SML 20 and perfume are mixed together and then mixed with a small quantity of the above gel before being mixed with the remaining gel.

Finally, the polyester glitter is stirred in. To improve the appearance the Carbopol gel can be colored yellow (for golden polyester glitter) or blue (for blue polyester glitter).

Formula No. WF11-14

**Wet Gel with Glitter Effect, Contains Alcohol**

	%W/W
I Water	20.0
Ethyl alcohol 96%	41.0
Carbopol 940	0.7
II Water	5.0
Triethanolamine	1.0
III Water	29.2
Nasuna B	1.0
IV Eumulgin RO 40	0.8
Perfume	0.3
V Polyester glitter blue 25/105R	1.0

Preparation: See Formula WF11-14

Formula No. WF11-16

**Wet Gel**

	%W/W
Ethyl alcohol 96%	40.0
Water	53.1
Carbopol 940	0.6
Triethanolamine	1.0
Eumulgin SML 20	5.0
Perfume	0.3

Preparation: See Formula WF11-14

Formula No. WF11-17

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Wet Gel with Reduced Alcohol Content

	%W/W
I Water	40.0
Ethyl alcohol 96%	20.0
Carbopol 940	0.8
II Water	5.0
Triethanolamine	1.2
III Nasuna B	0.5
Water	30.0
IV Eumulgin HRE 40	2.0
Perfume	0.5

Preparation: Carbopol 940 is sprinkled into the alcohol/water mixture stirring continuously, and allowed to swell. Later it is neutralized with the triethanolamine dissolved in 5 parts water.

Nasuna B is dissolved in the remaining water, stirring continuously. This solution is added to the swollen Carbopol.

Eumulgin SML 20 and perfume are mixed together and then mixed with a small quantity of the above gel before being mixed with the remaining gel.

Formula No. WF11-19

Wet Gel, Alcohol-Free

	%W/W
I Water	55.0
Carbopol 940	0.8
II Water	5.0
Triethanolamine	2.0
III Water	35.0
Nasuna B	1.0
IV Polyquart H81	1.0
Perfume	0.2

Preparation: See formula WF11-19

Formula No. WF11-23

Wet Gel, Alcohol-Free

	%W/W
I Eumulgin HRE 40	1.0
Perfume	0.5
II Water	55.0
Carbopol 940	0.8
III Water	5.0
Triethanolamine	1.5
IV Nasuna B	0.5
Water	35.7

Preparation: See formula WF11-19

Formula No. WF11-25

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Wheat Moisturizing and Styling Gel

	%W/W
A. Tween 20 (Polysorbate 20)	1.00
Ivarlan AWS (PPG-12 PEG-65 Lanolin Oil)	2.00
Fragrance (Novarome Tuberose MG-02)	0.20
Glycerin	10.00
Deionized Water	22.20
Wheat-Tein NL (Hydrolyzed Wheat Protein)	1.00
Preservative, color	q.s.
B. Carbopol 940 (2% Aq. Sol'n) (Carbomer 940)	50.00
C. Aminomethyl Propanol	0.60
D. Isopropyl Alcohol 99%	10.00
PVP/VA E-735 (PVP/VA Copolymer)	2.00
E. Kera-Tein 1000 AS (Ethyl Ester of Hydrolyzed Keratin)	1.00

**Procedure:**

Pre-mix AWS, Tween and Fragrance until clear. Add the Glycerin, water and wheat. Mix until homogeneous. Add to Phase B. Add Phase C (AMP) to A/B. Mixture will clear and thicken. Pre-mix Phase D. Add to batch. Add Phase E. Mix.

**Properties:**

A thick, spreadable gel providing hair holding and moisturizing. Adds shine and protective proteins to the hair. Kera-Tein 1000 AS is a substantive cationic ester. Wheat-Tein NL is a substantive, film-forming protein.

Formula #HF-1003

Hi-Fashion Hair Sculpture Gel

	%W/W
A. Deionized Water	19.50
Pro-Tein ES-20 (Ethyl Ester of Hydrolyzed Collagen)	3.00
Tetrasodium EDTA	0.10
Aqua-Tein C (Collagen Amino Acids (and) Acetamide MEA (and) Propylene Glycol)	1.00
Carbomer 940 - 2% Aq. Sol'n	44.00
B. SD Alcohol 40A	30.00
PVP/VA E535	2.00
Fragrance	0.10
C. Aminomethyl Propanol-95	0.30

**Procedure:**

1. Mix Phase A at room temperature.
2. Pre-mix Phase B, then add to A.
3. Add Phase C to A/B.

**Properties:**

A pumpable, styling gel for the very fashionable new hair-styles. Repairs and conditions while providing a professional-hold. Protein ES-20 is a cationic protein which provides shine and flex to the hair. This cationic protein is unusual in that it is compatible with the anionic Carbopol.

Aqua-Tein C nurtures the hair from within providing a natural feel and bounce while protecting the hair from external damage.

Formula #HF-1002

SOURCE: Maybrook Inc.: Suggested Formulations

**3 in 1 Professional Conditioning Mousse with Sunscreen**

<u>Ingredients:</u>	<u>% by Weight</u>
Water	70.153
Polycare 133	3.15
Igepal CO-630	0.18
Miranol Ultra C-32	0.18
Syntase 230	0.045
Mirapol A-15	0.10
dl-Panthenol	0.045
Alcohol (190 proof)	16.00
Silbione 71634	0.120
Silbione 70646	0.027
AMP-95	q.s. pH=5.0
Preservative, Fragrance	q.s.
A-46 Propellant	10.00

**Procedure:**

1. Add water to the main beaker and dissolve the dl-Panthenol and Syntase 230.
2. Add and dissolve the Polycare 133.
3. Add Igepal CO 630, Mirapol A-15, Miranol Ultra C-32, and Alcohol.
4. Prephase Silbione 71634 and Silbione 70646, then add to main phase.
5. Add fragrance and preservative.
6. Adjust pH with AMP-95.
7. Package product using Propellant A-46.

**Valve:**

Actuator:	021560
Stem:	1270
Stem gasket:	0330
Spring:	6010
Body:	0-6973
Mounting Clip:	Conical, Aluminum Epon

**Typical Formulation Properties:**

Appearance of JUS: White, Opaque Lotion  
pH: 4.5-5.0

Formulation PF-0283 suggested by Rhone-Poulenc

SOURCE: Angus Chemical Co.: Angus Product Formulary

**55% VOC DME/HFC-152a Aerosol Hair Spray**

<u>Ingredients:</u>	<u>% by Weight</u>
Water	22.42
Ethanol	34.60
AMP-95	0.56
Acudyne 255 (41% solids)	12.50
HFC-152a	9.60
Dimethylether (DME)	20.40
Dow Corning 190 Fluid	0.10

**Procedure:**

Mix water, ethanol, AMP-95 and plasticizer. Add polymer with stirring. Mix until solution is slightly turbid, but actives are dispersed. Charge HFC-152a and DME. The mixture immediately turns clear.

**Properties:**

Cloud Point: <-22F

Vapor Pressure: 40 psig @ 70F

Formulation PF-0316 suggested by Rohm and Haas

**55% VOC Pump Hair Spray**

<u>Ingredients:</u>	<u>% by Weight</u>
Water	31.84
Ethanol	55.00
AMP-95	0.56
Acudyne 255 (41% solids)	12.50
Dow Corning 190 Fluid	0.10

**Procedure:**

Mix water, ethanol, AMP-95 and plasticizer. Add polymer with stirring. Mix until solution is clear. Neutralization level is 55%.

**Properties:**

Cloud Point: <-22F

Viscosity: 8.5 cps, spindle #1 @ 60 rpm

Formulation PF-0315 suggested by Rohm and Haas

SOURCE: Angus Chemical Co.; Angus Product Formulary

**80% VOC Non-Aerosol Hair Spray**

<u>Ingredients/CTFA Designations:</u>	<u>% by Weight</u>
Amphomer LV-71/Octylacrylamide/Acrylates/Butylaminoethyl Methacrylate Copolymer	5.00
AMP-95/Aminomethyl Propanol	0.98
Uvinul MS-40/Benzophenone-4	0.05
d1-Panthenol/Panthenol	0.21
DC-193/Dimethicone Copolyol	0.30
Citroflex-2/Triethyl Citrate	0.20
Armeen DM-18D/Dimethyl Stearamine	0.17
Deionized Water	13.09
Anhydrous Ethanol, SDA-40	80.00

**Procedure:**

Dissolve AMP and Armeen DM-18D in water and ethanol. While maintaining good agitation, slowly sift in Amphomer LV-71. When solution is complete, add remaining ingredients and mix well until homogeneous. Filter and fill.

Formulation PF-0259 suggested by National Starch & Chemical Co.

**80% VOC Pump Hair Spray with Gantrez C-425 and Gantrez XL-80**

<u>Ingredients:</u>	<u>% by Weight</u>
Ethanol (190 proof)	79.63
Water	3.96
Gantrez XL-80 (PVM/MA Decadiene Crosspolymer)	5.70
AMP-95	0.41
Gantrez V-425 (Butyl Ester of PVM/MA Copolymer)	10.00
Phenyl Trimethicone	0.10
Fragrance	0.20

**Procedure:**

1. Add Ethanol and water to main tank. Start mixing and add Gantrez XL-80. Mix until completely blended.
2. Add AMP-95 and mix until blended.
3. Add Gantrez V-425 and then additional ingredients while mixing completely after each addition.

Formulation PF-0260 suggested by ISP

SOURCE: Angus Chemical Co.: Angus Product Formulary

80% VOC Pump Hair Spray

<u>Ingredients:</u>	<u>% by Weight</u>
Resyn 28-2930	5.41
Amphomer LV-71	1.19
AMP-95	0.74
Dimethicone copolyol	0.11
Cocamidopropyl betaine	0.10
Fragrance	0.15
Deionized water	12.30
Anhydrous ethanol, SDA-40	80.00

Procedure:

Dissolve AMP-95 in water and ethanol. While maintaining good agitation, slowly sift in Resyn 28-2930 and Amphomer LV-71. When solution is complete, add remaining ingredients and mix until homogeneous. Filter and fill.  
Formulation PF-0206 suggested by National Starch and Chemical

Non-Aerosol Hair Spray

<u>Ingredients:</u>	<u>% by Weight</u>
A. Alcohol SD-40	60.00
Resyn 28-2930	3.00
PPG-10 cetyl ether	0.80
AMP-95	0.40
B. Deionized water	35.60
Crotein ADW	0.20

Procedure:

Add the AMP-95 of Part A to the alcohol with mixing. When uniform, add the Resyn 28-2930 with mixing. When uniform, add the PPG-10 cetyl ether. Separately, mix the ingredients of Part B, then add to Part A with mixing.  
Formulation PF-0222 suggested by Croda Inc.

80% VOC Aerosol Hairspray Formulation  
Stiff Feel

<u>Ingredients:</u>	<u>% by Weight</u>
Advantage V Resin	8.00
AMP-95	0.24
SD Alcohol 40	46.00
Distilled Water	15.76
Propellant A-17	9.00
Dimethyl Ether Propellant	21.00
Plasticizer	q.s.
Fragrance	q.s.
Formulation PF-0205 suggested by International Specialty Products	

SOURCE: Angus Chemical Co.: Angus Product Formulary

**80% VOC Pump Hair Spray**

<u>Ingredients:</u>	<u>% by Weight</u>
Lovocryl-47	4.13
Resyn 28-2930	1.37
AMP-95	0.96
Sandopan LS-24	0.20
DC Q2-5220	0.20
Deionized Water	13.14
Anhydrous Ethanol, SDA-40	80.00
Fragrance	q.s.
Valve: Seaquist Euromist II 160 output with a 0.016" x 0.010" deep actuator.	

**Procedure:**

Dissolve AMP in ethanol. Slowly sift in Resyn 28-2930, maintaining good agitation. When dissolved, slowly sift in Lovocryl-47. Upon dissolution, add the water followed by the remaining ingredients. Continue mixing until homogeneous. Filter and fill. Formulation PF-0282 suggested by National Starch & Chemical Corp.

**80% VOC Aerosol Hair Spray**

<u>Ingredients:</u>	<u>% by Weight</u>
Amphomer LV-71	3.75
AMP-95	0.78
Armeen DM 18D	0.14
Citroflex-2	0.20
Monamid 716	0.15
Solulan-75	0.10
Neo-Heliopan AV	0.10
Glycerine	0.10
Panthenol	0.10
Deionized Water	14.58
SDA-40 Anhydrous	50.00
Fragrance	q.s.
Prop. A-17 (n-butane)	15.00
Dimethyl ether	15.00

**Procedure:**

Dissolve AMP-95 and Armeen DM 18D in water and ethanol. While maintaining good agitation, slowly sift in Amphomer LV-71. When solution is complete, add remaining ingredients and mix until homogeneous. Filter, fill and charge with propellants.

**Precision Valve and Actuator Specifications:**

Stem:	04-1215 0.16"
Stem Gasket:	05-0350 Butyl
Spring:	06-6010 SS
Body:	07-7970 .016" LD
Mounting Cup:	32-7300-62 Flat, Epon Top/Bottom Dimpled, FBS
Dip Tube:	09-2010
Actuator Style:	21-8146 Kosmos
Orifice Size:	.025" MB Concave

Formulation PF-0284 from National Starch and Chemical Co.

**SOURCE:** Angus Chemical Co.; Angus Product Formulary



**80% VOC Pump Hair Spray**

<u>Ingredients:</u>	<u>% by Weight</u>
Resyn 28-2930	5.41
Amphomer LV-71	1.19
AMP-95	0.74
Dimethicone copolyol	0.11
Cocamidopropyl betaine	0.10
Fragrance	0.15
Deionized water	12.30
Anhydrous ethanol, SDA-40	80.00

**Procedure:**

Dissolve AMP-95 in water and ethanol. While maintaining good agitation, slowly sift in Resyn 28-2930 and Amphomer LV-71. When solution is complete, add remaining ingredients and mix until homogeneous. Filter and fill.  
Formulation PF-0206 suggested by National Starch and Chemical

**Non-Aerosol Hair Spray**

<u>Ingredients:</u>	<u>% by Weight</u>
A. Alcohol SD-40	60.00
Resyn 28-2930	3.00
PPG-10 cetyl ether	0.80
AMP-95	0.40
B. Deionized water	35.60
Croton ADW	0.20

**Procedure:**

Add the AMP-95 of Part A to the alcohol with mixing. When uniform, add the Resyn 28-2930 with mixing. When uniform, add the PPG-10 cetyl ether. Separately, mix the ingredients of Part B, then add to Part A with mixing.  
Formulation PF-0222 suggested by Croda Inc.

**80% VOC Aerosol Hairspray Formulation**  
**Stiff Feel**

<u>Ingredients:</u>	<u>% by Weight</u>
Advantage V Resin	8.00
AMP-95	0.24
SD Alcohol 40	46.00
Distilled Water	15.76
Propellant A-17	9.00
Dimethyl Ether Propellant	21.00
Plasticizer	q.s.
Fragrance	q.s.

Formulation PF-0205 suggested by International Specialty Products

SOURCE: Angus Chemical Co.: Angus Product Formulary

**80% VOC Pump Hair Spray with  
Gantrez V-225, Advantage V and Gantrez XL-80**

<b><u>Ingredients:</u></b>	<b><u>% by Weight</u></b>
Ethanol (190 proof)	78.82
Water	3.13
Gantrez XL-80 (PVM/MA Decadiene Crosspolymer)	5.70
AMP-95	0.45
Advantage V (VA/Butyl Maleate/Isobornyl Acrylate Copolymer)	5.75
Gantrez V-225 (Ethyl Ester of PVM/MA Copolymer)	5.75
Phenyl Trimethicone	0.10
Fragrance	0.30

**Procedure:**

1. Add Ethanol and water to main tank. Start mixing and add Gantrez XL-80. Mix until completely blended.
2. Add AMP-95 and mix until blended.
3. Add Advantage V, Gantrez V-225 and then additional ingredients while mixing completely after each addition.

Formulation PF-0261 suggested by ISP

**Alcohol-Free Styling Mist**

<b><u>Ingredients/CTFA Designations:</u></b>	<b><u>% by Weight</u></b>
Amphomer LV-71/Octylacrylamide/Acrylates/Butylamino-ethyl Methacrylate Copolymer	7.00
AMP-95/Aminomethyl Propanol	1.50
Monamid 716/Lauramide DEA	0.15
Glycerine	0.10
Dow Corning 190/Dimethicone Copolyol	0.20
Uvimul MS-40/Benzophenone 4	0.05
Fragrance/Sunflower Fragrance 12294	0.20
Germaben II/Propylene Glycol (and) Diazolidinyl Urea (and) Methylparaben (and) Propylparaben	1.00
Deionized Water	89.80

Formulation PF-0262 suggested by National Starch & Chemical Co.

SOURCE: Angus Chemical Co.; Angus Product Formulary

**80% VOC Shine and Hold Spray**

<u>Ingredients:</u>	<u>% by Weight</u>
Amphomer	5.00
AMP-95	0.82
Dow Corning 190	5.00
Monamid 716	0.20
Anhydrous Ethanol, SDA-40	80.00
Deionized Water	8.98

**Procedure:**

Dissolve AMP-95 in ethanol and water. While maintaining good agitation, sift in Amphomer. When solution is complete, add DC-190 and Monamid 716. Mix until homogeneous. Filter and fill. Formulation PF-0270 suggested by National Starch & Chemical Co.

**Non-Aerosol 80% VOC Hair Spray**

<u>Ingredients:</u>	<u>% by Weight</u>
Gantrez A-425	24.00
SD-40 200P	68.00
AMP-95	0.98
Phenyl Trimethicone	0.10
Deionized Water	6.67
Fragrance	0.25

**Procedure:**

1. Add Ethanol and AMP-95 to suitable container. Mix well.
2. Add Gantrez A-425. Mix well.
3. Add Phenyl Trimethicone. Mix well.
4. Add fragrance. Mix well.

Formulation PF-0287 suggested by ISP

**Firm Holding Hairspray**

Strong hold, for all climatic zones, easy combability, good brush-out, good wash-out properties.

<u>Ingredients:</u>	<u>% by Weight</u>
Luvimer 100P	3.00
AMP Regular	0.69
Ethanol	36.31
Dimethyl ether	60.00
Perfume	q.s.

**Procedure:**

Combine ethanol, AMP and perfume. Add Luvimer 100P to the solution and mix until clear.

Cloud point: -35C

Pressure: 3.9 bar

Density: 0.74 g/cm<sup>3</sup>

Formulation PF-0288 suggested by BASF

**SOURCE:** Angus Chemical Co.: Angus Product Formulary

**80% VOC Super Hold Hair Spray**

Silicone polymer blend reduces viscosity, improves spray pattern by functioning as a defoamer and improves set retention.

<u>Ingredients:</u>	<u>% by Weight</u>
Part A:	
Vinyl acetate/butyl maleate/isobornyl acrylate copolymer	10.00
AMP-95	0.14
Phenyl trimethicone (Abil AV-20HS)	0.10
Dimethicone copolyol (Abil B 8852)	0.10
Dimethicone/sodium PG propyl dimethicone thiosulfate copolymer (Abil S-201)	0.20
SD alcohol 40	37.71
Water	16.50
Dimethyl ether	21.00
Stearyl heptanoate (Tegosoft SH)	0.15
Sodium lauroyl sarcosinate	0.05
Disodium dodecenyl sulfosuccinate	0.05
Part B:	
Isobutane (and) propane	14.00

**Procedure:**

Mix A, mixing well between additions. Fill into spray containers. Charge spray containers with B.

Formulation PF-0252 suggested by Goldschmidt

**80% VOC Hairspray**

<u>Ingredients:</u>	<u>% by Weight</u>
Part A:	
AMP-95	0.70
Deionized water	11.00
Ethanol	72.00
Part B:	
Monoethyl ester of polymethyl vinyl ether/maleic acid (Gantrez V-215)	16.00
Part C:	
Fragrance	0.30

**Procedure:**

Mix A until uniform. Add B, mix until uniform. Add C.

Formulation PF-0251 suggested by ISP

SOURCE: Angus Chemical Co.: Angus Product Formulary

# **Section VII**

## **Insect Repellents**

Insect Repellent Cream O/W

	<u>%W/W</u>
I Cutina MD	8.0
Siebert Stearin L2SM	8.0
Eumulgin B2	1.0
Cetiol LC	5.0
Repellent 790	10.0
II Viscontran MHPC 6000 2% solution	5.0
Triethanolamine	1.0
Water	62.0

Note: Avoid contact with eyes and mucous membranes

Formula No. I11-01

Insect Repellent Cream O/W

	<u>%W/W</u>
I Cutina MD	12.0
Siebert Stearin L2SM	4.0
Eumulgin B1	1.5
Eumulgin B2	1.5
Cetiol V	5.0
Repellent oil 28432C	10.0
II Viscontran HEC 30 000 PR-4% solution	37.4
III Triethanolamine	0.2
Water	28.4

Note: Avoid contact with eyes and mucous membranes

Formula No. I11-02

Insect Repellent Emulsion O/W, Liquid

	<u>%W/W</u>
I Cutina MD	2.5
Siebert Stearin L2SM	3.0
Eumulgin B1	1.5
Eumulgin B2	1.5
Cetiol V	5.0
Repellent 790	10.0
II Veegum	2.5
Triethanolamine	0.2
Water	73.8

Note: Avoid contact with eyes and mucous membranes

Formula No. I21-01

Insect Repellent Oil, Alcoholic

	<u>%W/W</u>
Eutanol G	40.0
Paraffin oil, high viscous	20.0
Cetiol HE	10.0
Repellent 790	20.0
Ethyl alcohol 96%	10.0

Note: Avoid contact with eyes and mucous membranes

Formula I31-01

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Insect Repellent Stick

	%W/W
Eutanol G	10.0
Comperlan 100	8.0
Siebert Stearin L2SM	9.3
Menthol	2.0
Dimethyl phthalate	30.0
Isopropyl alcohol	24.0
Henkel Glycerin 86% DAB 9	13.2
Sodium hydroxide solution 38%	3.5
Preparation: Eutanol G, Comperlan 100, Siebert Stearin, dimethyl phthalate and isopropyl alcohol are heated on the water bath at 70C until the Comperlan has melted. Together with the sodium hydroxide solution, the glycerine is also heated to 70C and added to the alcoholic fat melt. The compound is then cast into moulds, it solidifies in a few minutes and can be taken out of the mould before it completely cools. It is advisable to work with a slight excess of alcohol. The amount is approx. 10% in the case of small batches, whilst in the case of larger ones, correspondingly less.	
Note: Max. pH 11	
Formula No. I41-01	

Insect Repellent Stick

	%W/W
Lanette 18	12.0
Eutanol G	5.0
Comperlan HS	25.0
Carnauba wax	3.0
Hard paraffin 72C	12.0
Ethyl alcohol 96%	10.0
Repellent oil 28432C	33.0
Preparation: Lanette 18, Eutanol G, Comperlan HS, Carnauba wax and hard paraffin are melted on the water bath. Ethyl alcohol and repellent oil are mixed together and heated to 70C. After the fat melt has also cooled down to 70C, this mixture is slowly stirred into it and then cast in moulds. The compound solidifies in a few minutes. The sticks can be taken out of the mould before they have completely cooled down.	
Note: Avoid contact with eyes and mucous membranes	
Formula No. I41-02	

Insect Repellent Spray, Aerosol-Packed

	%W/W
Repellent oil 28432 C	20.0
Eutanol G	40.0
Ethyl or isopropyl alcohol	40.0
Filling: 50 parts active ingredient concentrate	
50 parts propellant 12/114 (40:60)	
Note: Avoid contact with eyes and mucous membranes	
Formula No. I71-01	

SOURCE: Henkel KGaA: Cosmetic Model Formulae

# **Section VIII**

## **Lotions**



**Alpha Hydroxy Acid Lotion**

Rich emulsion containing alpha hydroxy acid to gently exfoliate and rejuvenate the skin. Extra mildness.

<u>Ingredients:</u>	<u>%W/W</u>	<u>Function</u>
1. Grillocoase PS (Methyl Glucose Sesquistearate)	3.00	Emulsifier
2. Behenyl Alcohol (Lanette 22)	3.00	Thickener
3. Mineral Oil 9NF	7.50	Emollient
4. Octyl Octanoate (Tegosoft EE)	7.50	Emollient
5. *Grilloten LSE 65K (Sucrose Cocoate)	2.00	Emulsifier/ Emollient
6. Sodium Cetearyl Sulfate (Lanette E)	0.10	Emulsifier/ Cleaning
7. Glycerine	3.00	Humectant
8. Xanthan Gum (Keltrol G-T)	0.40	Thickener
9. Distilled/Deionized Water	62.70	----
10. Patlac LA (Lactic Acid, 88%)	5.60	Hydroxy Acid
11. Sodium Hydroxide (20% Soln.)	5.00	pH Adjuster
12. Glydant	q.s.	Preservative
13. Fragrance-Nature's Herbal #165-050	0.20	Odor

\* Substitution with Ritalan C and Natural Extract DP is being investigated.

**Compounding Procedure:**

Add Patlac LA to 10% water and adjust pH with Sodium Hydroxide solution to 3.8. In remaining water, dissolve item 8. Add items 6 and 7 and heat to 80C. Separately heat items 1-5 to 80C. Add items 1-5 to items 6-9 and mix. While mixing cool to 45C and add items 12 and 13. At 40C add prepared Lactic Acid solution (pH 3.8) and homogenize.

Ref No. 119-11

**Light Hand Lotion**

<u>Ingredients:</u>	<u>%W/W</u>	<u>Function</u>
1. Ritachol 2000 (R.I.T.A. Blend)	3.50	Emulsifier
2. Pationic SSL (Sodium Stearoyl Lactylate)	1.40	Mildness
3. Rita IPP (Isopropyl Palmitate)	1.30	Emollient
4. Distilled/Deionized Water	88.50	----
5. Propylene Glycol	5.00	Humectant
6. Fragrance	0.10	Odor
7. Glydant	0.20	Preservative

**Compounding Procedure:**

Combine items 1-3 and heat to 70C. Combine items 4 and 5 and heat to 70C. Add oil phase to water phase and mix well. Cool to 40C and add fragrance/dyes/preservatives.

Ref. No. 119-92

SOURCE: R.I.T.A. Corp.: Skin Care Formulary

**Alpha Hydroxy Acid Lotion**

Rich emulsion containing alpha hydroxy acid to gently exfoliate and rejuvenate the skin.

<u>Ingredients/Trade Name:</u>	<u>%W/W</u>	<u>Function</u>
1. Grillocoase PS (Methyl Glucose Sesquistearate)	3.00	Emulsifier
2. Behenyl Alcohol (Lanette 22)	3.00	Thickener
3. Mineral Oil 9NF	7.50	Emollient
4. Isopropyl Palmitate	7.50	Emollient
5. Sodium Cetearyl Sulfate (Lanette E)	0.10	Emulsifier, Cleaning
6. Glycerine	3.00	Humectant
7. Xanthan Gum (Keltrol G-T)	0.40	Thickener
8. Distilled/Deionized Water	64.70	----
9. Patlac LA (Lactic Acid 88%)	5.60	Hydroxy Acid
10. Sodium Hydroxide (20% Soln.)	5.00	pH Adjuster
11. Glydant	q.s.	Preservative
12. Fragrance-Nature's Herbal #165-050	0.20	Odor

**Compounding Procedure:**

Add Patlac LA to 10% water and adjust pH with Sodium Hydroxide solution to 3.8. In remaining water, dissolve item 7. Add items 5 and 6 and heat to 80C. Separately heat items 1-4 to 80C. Add items 1-4 to items 5-8 and mix. While mixing, cool to 45C and add items 11 and 12. At 40C add prepared Lactic Acid solution (pH 3.8) and homogenize.

Ref. No. 119-18B

**Hand and Body Lotion**

All over hand and body lotion with excellent feel and moisturizing benefits.

<u>Ingredients:</u>	<u>%W/W</u>	<u>Function</u>
1. Mineral Oil	5.00	Emollient
2. Petrolatum	4.00	Emollient
3. Ritawax ALA (R.I.T.A. Blend)	6.00	Skin Feel
4. Ritachol (Mineral Oil and Lanolin Alcohol)	4.00	Rub In
5. Ritapro 165 (R.I.T.A. Blend)	5.00	Emulsifier
6. Polyquta 3000 (Polyquaternium-10)	0.50	Skin Feel
7. Distilled/Deionized Water	69.10	----
8. Glycerine	6.00	Moisture
9. Fragrance - Eau Sauvage 169-118	0.20	Odor
10. Glydant	0.20	Preservative

**Compounding Procedure:**

Dissolve Polyquta 3000 in water. Add Glycerine and heat to 70C. Separately heat items 1-5 to 70C. Add items 1-5 to water mixture while mixing. Cool and add preservative and perfume.

Ref. No. 119-36

SOURCE: R.I.T.A. Corp.: Skin Care Formulary

**Barrier Lotion**

This buttery lotion applies easily and protects the hands from harsh environments.

<u>Ingredient:</u>	<u>Weight%</u>	<u>Function</u>
Part A:		
Deionized Water	75.30	Diluent
Glycerin	3.00	Humectant
Triethanolamine (99%)	0.40	Neutralizing Agent
Part B:		
Dimethicone, 1000 cs.	10.00	Barrier
Pemulen TR-1	0.30	Emulsifier
Carbopol 954	0.20	Thickener
Part C:		
Mineral Oil	10.00	Barrier
Part D:		
Propylene Glycol (and) Diazolidinyl		
Urea (and) Methylparaben (and)		
Propylparaben	0.80	Preservative

- (1) Acrylates/C10-30 Alkyl Acrylate Crosspolymer (BFGoodrich)
- (2) Carbomer (BFGoodrich)
- (3) Drakeol 19 (Penreco)
- (4) Germaben II-E (Sutton Laboratories)

**Preparation:**

1. Blend Part A ingredients in a vessel which will contain the entire formulation.
2. Prepare Part B in a separate vessel by mixing polymers in dimethicone to produce a fine suspension.
3. With vigorous agitation, add Part B to Part A. Promptly add Part C to the mixture. Mix to produce a smooth, glossy product.
4. Add Part D and blend thoroughly.

SOURCE: BFGoodrich Co.: Formula P0024

Body Lotion

Thick lotion leaving a soft touch.

Material/CTFA-Index:

A: Emulgator E2149/Stearyl Alcohol (and) Steareth-7	7.00%
Tegosoft 189/Isooctadecyl Isononanoate	1.00
Wacker-Belsil SM 6018/Stearyl Methicone	2.50
Isopropyl Myristate	7.00

B: Wacker-Belsil DMC 6035/Methicone Copolyol Acetate	2.00
--	------

C: Carbopol 934 2%ig/Carbomer 934	15.00
Water	65.50

Preservatives, fragrances, pigments q.s.

Heat A and C each to 70C. Mix C well into A, add B.

Formulation 1326 AH

Body Lotion

White, creamy lotion which dissolves easily.

Material/CTFA-Index:

A: Mineral Oil, thinly liquid	5.00%
Stearic acid	5.00
Cetyl Alcohol	1.50

B: Water	81.20
Allantoin/5-Ureido-hydantoin	0.50
Triethanolamine	0.80

C: Propylene Glycol	3.00
Wacker-Belsil DMC 6035/Methicone Copolyol Acetate	3.00

Preservative, Perfume, Colourings q.s.

Heat A and B to 65C. Add A to B with stirring. Add C and stir until cool.

Formulation 1225/7 AH

SOURCE: Wacker Silicone: Suggested Formulations

Body Lotion

Thick lotion with good absorption leaving a soft touch on the skin.

Material/CTFA-Index:

A: Emulgator E2149/Stearyl Alcohol (and) Steareth-7	7.00%
Tegosoft 189/Isooctadecyl Isononanoate	1.00
Wacker-Belsil SDM 6022/Dimethicone (and) Stearoxy Dimethylsilane (and) Stearoxy Dimethyldisiloxane	2.50
Isopropyl Myristate	7.00
B: Wacker-Belsil DMC 6038/Dimethicone Copolyol	3.00
Carbopol 934 2%ig/Carbomer 934	5.00
Triethanolamine 2%ig	5.00
Water	69.50
Preservatives, fragrances, pigments	q.s.

Heat A and B each to 70C. Mix B well into A.

Formulation 1337 AH

Skin Lotion

Thin lotion with good spreadability and quick absorption.

Material/CTFA-Index:

A: Stearic Acid	2.80%
Cetyl Alcohol	1.00
B: Glycerine	2.00
Wacker-Belsil DMC 6038/Dimethicone Copolyol	4.00
Triethanolamine	0.80
Wasser dest./Water	89.40
Preservatives, fragrances, pigments	q.s.

Heat A and B to 80C, stir A into B.

Formulation 1336 AH

SOURCE: Wacker Silicones: Suggested Formulations

### Body Lotion

Thick lotion. Easily spread, quickly absorbed and leaves a pleasant soft feeling on the skin.

#### Material/CTFA-Index:

A: Emulgator E 2155/Stearyl Alcohol (and) Steareth and Steareth-10	6.00%
Isopropyl Myristate	10.00
Stearyl Alcohol	1.00
Mineral oil	3.00
Belsil DM 100/Dimethicone	0.50
B: Glycerine	3.00
Wasser dest./Water	76.00
Preservatives, fragrances, pigments	q.s.
Heat A and B to 65C, mix and homogenise, cool whilst stirring.	
Temperature stability: at 45C over 10 weeks.	
Formulation 153 AH	

### Body Lotion

Easily spread, quickly absorbed.

#### Material/CTFA-Index:

A: Belsil PDM 200/Phenyl Dimethicone	3.60%
Stearic Acid	2.80
Cetyl Alcohol	1.00
B: Glycerine	2.00
Triethanolamine	0.80
Wasser dest./Water	89.80
Preservatives, fragrances, pigments	q.s.
Heat A and B each to 80C, stir A into B.	
Formulation 187/4 AH	

### Hand Lotion

White, thick lotion. Does not feel greasy.

#### Material/CTFA-Index:

Water	79.40%
Carbopol 934/Carbomer 934	0.40
Mineral oil, low viscosity	10.00
Belsil DM 350/Dimethicone	10.00
Triethanolamine	0.20
Preservatives, perfume	q.s.
Mix the Carbomer 934 slowly into the water until a homogeneous mixture is formed. Mix the mineral oil and Belsil DM 350 and add whilst stirring. Finally stir in the triethanolamine.	
Temperature stability: at 45C over 10 weeks.	
Formulation 188 AH	

SOURCE: Wacker Silicone; Suggested Formulations

Body Lotion

Thick lotion. Leaves a soft feeling on the skin.

Material/CTFA-Index:

A: Emulgator E 2149/Stearyl Alcohol (and) Steareth	7.00%
Tegosoft 189/Isooctadecyl Isononanoate	1.00
Belsil SDM 6022/Dimethicone (and) Stearoxy Dimethyl-	
silane (and) Stearoxy Dimethyldisiloxane	2.50
Isopropyl Myristate	7.00
Belsil DMC 6035/Dimethicone Copolyol Acetate	2.00
B: Carbopol 934 2%ig/Carbomer 934	15.00
Water	65.50
Preservatives, pigments, fragrances	q.s.

Heat A and B each to 70C. Stir B well into A.

Temperature stability: at 45C 8 weeks.

Formulation 360 AH

Hand Lotion

Very greasy, but well absorbed. Good water-repellent effect.

Material/CTFA-Index:

A: Polyethylenglykol 400/PEG-8	2.00%
Isopropyl Myristate	3.00
Cetyl Alcohol	1.00
Stearic Acid	2.00
B: Tris Amino/Tromethamine	0.50
Propylene Glycol	4.50
Glycerine	2.00
Water	65.00
C: Belsil CM 1000/Cyclomethicone(a.) Dimethiconol	20.00
Preservatives, perfume, pigments	q.s.

Heat A and B to approx. 65C. Stir B into A, add C and stir until cool.

Formulation 359 AH

SOURCE: Wacker Silicone: Suggested Formulations

Body Lotion

White lotion with low viscosity. Leaves a soft feeling on the skin.

Material/CTFA-Index:

A: Water	84.50%
Carbopol 934/Carbomer 934	0.10
B: Glycerine	3.00
Triethanolamine	0.90
C: Cetyl Alcohol	1.00
Stearic Acid	0.80
Arlacel 165/Glyceryl Stearate se	1.50
D: Isopropyl Myristate	1.50
Diisopropyladipat	1.50
Mineral Oil (low viscosity)	2.00
E: Belsil CM 1000/Cyclomethicone(a.) Dimethiconol	3.00
Preservatives, perfume, pigments	q.s.

Mix A and heat to 75C, add B. Heat C to 72C and stir slowly into AB. Heat D to 72C and stir slowly into ABC, add E and stir until cool.

Temperature stability: at 45C more than 10 weeks.

Formulation 625 AH

Body LotionMaterial/CTFA-Index:

A: Mineral Oil (high viscosity)	1.00%
Cetyl Alcohol	1.00
Stearic Acid	1.50
Belsil CM 030/Cyclomethicone	5.00
Belsil SDM 6022/Dimethicone (and) Stearoxy Dimethylsilane (and) Stearoxy Dimethyldisiloxane	3.00
Belsil BNP/Boron Nitride	2.00
B: Triethanolamine	0.80
Propylene Glycol	3.00
Water	82.70
Preservatives, fragrances, pigments	q.s.

Heat A and B to 80C. Stir A into B, mix well. Cool whilst stirring.

Temperature stability: at 45C over 10 weeks.

Formulation 775AH

SOURCE: Wacker Silicone: Suggested Formulations



**Body Lotion**

<b><u>Ingredients:</u></b>	<b>%</b>
Phase A:	
H <sub>2</sub> O, Deionized	64.80
Carbopol 934	0.20
Hetoxide G-7 (Glycereth-7)	3.00
Phase B:	
Hest MS (Myristyl Stearate)	3.00
Product SE-100 (Glyceryl Stearate & PEG-100 Stearate)	6.00
Hest L-2-0 (Laureth-2 Octanoate)	10.00
Stearic Acid	5.00
Phase C:	
TEA 99%	2.00
H <sub>2</sub> O, Deionized	5.00
Phase D:	
Germaben II	1.00

**Specifications:**

pH: 7.00

Viscosity #4/30: 8000 cps

**Procedure:**

- 1) In a stainless steel kettle, add H<sub>2</sub>O. Disperse Carbopol 934 using Lightnin' type mixer. Add Hetoxide G-7 and heat to 75C while mixing.
  - 2) In a separate stainless steel kettle, combine Phase A and heat to 75C while mixing.
  - 3) Add Phase B to Phase A. Mix until uniform.
  - 4) Premix Phase C and add to batch. Mix until uniform, avoiding aeration.
  - 5) Cool to 45C while mixing.
  - 6) Add Phase D. Mix until uniform.
- Formula HL 93-111

**Moisture Lotion**

<b><u>Ingredients:</u></b>	<b>%</b>
Phase A:	
H <sub>2</sub> O, Deionized	76.00
Phase B:	
Hest G-7-T0 (Glycereth-7 Trioctanoate)	5.00
Hest IS-2-0 (Isosteareth-2 Octanoate)	5.00
Heto1 CS (Cetearyl Alcohol)	5.00
Hetoxol L-12 (Laureth-12)	3.00
Product SE-100 (Glyceryl Stearate & PEG-100 Stearate)	5.00
Phase C:	
Germaben II	1.00

**Specifications:**

pH: 7.05

Viscosity #4/30: 9000 cps.

**Procedure:**

- 1) In separate stainless steel kettles, add Phase A and Phase B and heat to 75C while mixing.
  - 2) At 75C, add Phase B to Phase A while mixing until homogeneous.
  - 3) Cool to 40C and add Phase C. Mix well.
- Formula HL 93-120-5

**SOURCE: Heterene, Inc.: Suggested Formulations**

Cationic Conditioning Lotion

This novel formulation moisturizes while imparting a soft, velvety feel to the skin.

<u>Ingredient:</u>	<u>Weight%</u>	<u>Function</u>
<b>Part A:</b>		
Deionized Water	90.30	Diluent
Glycerin	2.00	Humectant
Triethanolamine (99%)	0.30	Neutralizing Agent
Distearyldimonium Chloride (1)	0.10	Conditioner
<b>Part B:</b>		
Isopropyl Palmitate	2.50	Emollient
White Petrolatum	1.00	Moisture Barrier
Octyl Hydroxystearate (2)	1.00	Emollient
Glycol Stearate	1.00	Opacifier
Dimethicone (100 cs.)	0.50	Lubricant
Pemulen TR-1	0.40	Emulsifier/Stabilizer
<b>Part C:</b>		
Propylene Glycol (and) Diazolidinyl Urea (and) Methylparaben (and) Propylparaben (4)	0.90	Preservative

- (1) Arosurf TA-100 (Sherex Chemical)  
 (2) Wickenol 171 (CasChem)  
 (3) Acrylates/C10-30 Alkyl Acrylate Crosspolymer (BFGoodrich)  
 (4) Germaben IIE (Sutton Laboratories)

**Preparation:**

1. Combine Part A ingredients in a vessel which will contain the entire formulation. With mixing, heat to 60C.
2. In a separate vessel, combine all Part B ingredients except Pemulen. Heat to 60C.
3. When all Part B ingredients have melted, reconfirm temperature and add Pemulen. Use agitation to break-up any soft agglomerates of resin.
4. With vigorous agitation, add Part B to Part A. Continue mixing to produce a smooth emulsion.
5. At 45-50C, add Part C. Continue mixing. Fill containers @ 35C.

SOURCE: BFGoodrich Co.: Formula P0021

**Cationic Conditioning Lotion**

<b><u>Ingredient:</u></b>	<b><u>Weight%</u></b>	<b><u>Function</u></b>
<b>Part A:</b>		
Deionized Water	80.00	Diluent
Glycerin	2.00	Humectant
Triethanolamine 99%	0.30	Neutralizing Agent
Distearyldimonium Chloride (1)	0.10	Conditioner
<b>Part B:</b>		
Hydroxypropyl Methyl Cellulose (2)	0.10	Film Former
Deionized Water	10.00	Diluent
<b>Part C:</b>		
Isopropyl Palmitate	2.50	Emollient
White Petrolatum	1.00	Moisture Barrier
Octylhydroxy Stearate (3)	1.00	Emollient
Glycol Stearate	1.00	Opacifier
Dimethicone	0.50	Lubricant
Cetyl Alcohol	0.20	Bodying Agent
Pemulen TR-1 (4)	0.40	Emulsifier/ Stabilizer
<b>Part D:</b>		
Propylene Glycol (and) Diazolidinyl Urea (and) Methyl Paraben (and) Propyl Paraben (5)	0.90	Preservative

(1) Arosurf TA-100 (Sherex Chemical)

(2) Methocel E4M (Dow Chemical Co.)

(3) Wickenol 171 (CasChem)

(4) Acrylates/C10-30 Alkyl Acrylate Crosspolymer (BFGoodrich)

(5) Germaben IIE (Sutton Laboratories)

**Preparation:**

1. Combine Part A ingredients in a vessel which will contain the entire formulation. With mixing, heat to 60C.
2. In a separate vessel, disperse the methocel into available deionized water. Gently warm to facilitate dissolution.
3. In a separate vessel, combine all of the oil phase ingredients (Part C), except Pemulen. Heat to 60C.
4. When all Part C ingredients have melted, reconfirm temperature and add Pemulen resin. Use agitation to break-up any soft agglomerates of resin.
5. With vigorous agitation, add Part C to Part A. Continue mixing to produce a smooth emulsion.
6. Combine the thickened Part B to the emulsion and continue mixing.
7. At 45-50C, add Part D. Continue mixing, and fill containers at 35C.

**SOURCE: BFGoodrich Co.: Formula P0026**

Cleansing Lotion, Liquid

	%W/W
Texapon N25	15.0
Lamepon S-TR	50.0
Nutrilan I	10.0
Lamesoft LMG	5.0
Irgasan DP 300	0.5
1,2-propylene glycol	2.0
Perfume	0.5
Sodium chloride	1.0
Water	16.0

Note: Medium viscous, WAS 19%

Preparation: Mix Irgasan DP 300 and 1,2-propylene glycol until you have a clear solution. Add Texapon N25 and the remaining ingredients in the order given above. Slight heating may be necessary to clear the Lamesoft LMG in the solution.

Formula No. L610-22

Cleansing Liquid

	%W/W
Lamepon S-TR	58.0
Monomuls 90-L 12	1.0
Ethanol 96%	10.0
Irgasan DP 300	0.5
Lamacit GML-20	2.0
Perfume	0.1
Water	28.4

Note: Low viscous, WAS 19%

Preparation: Lamepon S-TR, Monomuls 90-L 12 are stirred together and heated until they form a homogenous solution. After cooling to 40C the remaining ingredients are added in the order shown above.

Formula L610-23

Cleansing Lotion

	%W/W
Texapon N25	37.5
Lamepon S	28.0
Lamesoft LMG	5.0
Lamesoft 156	5.0
Sodium chloride	1.7
Perfume	0.3
Water	22.5

Note: Medium viscous, WAS 19%

Formula No. L610-24

SOURCE: Henkel KGaA; Cosmetic Model Formulae

Cleansing Lotion, Pearly

	%W/W
Texapon N40	20.0
Texapon TH	20.0
Euperlan PK 771	5.0
Hydagen P	2.0
Sodium chloride	4.0
Perfume	1.0
Water	48.0
Note: WAS 17%, low viscous	
Formula No. L610-09	

Cleansing Lotion, Pearly

	%W/W
Texapon N40	30.00
Texapon EVR	30.00
Euperlan PK771	10.00
Hydagen P	2.00
Sodium chloride	0.50
Perfume	1.00
Citric acid	0.05
Water	26.45
Note: WAS 19%, medium viscous	
Formula No. L610-11	

Deodorant, Cleansing Lotion, Liquid, Clear

	%W/W
Texapon N40	40.0
Dehyton AB30	5.0
Hydagen DEO	1.5
Comperlan KD	5.0
Perfume	0.5
Water	48.0
Note: WAS 18%	
Formula No. L610-13	

Cleansing Lotion, Clear, Soap Free, Especially Skin Compatible

	%W/W
Texapon K14S special	30.0
Comperlan LS	3.0
Sodium chloride	2.0
Soluvit complex	3.0
Perfume	1.0
Citric acid 10% solution	0.4
Water	60.6
Note: WAS 11%	
Formula No. L610-15	

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Cleansing Lotion, Pearly, Soap Free, Especially Skin Compatible

	<u>%W/W</u>
Texapon K14S special	40.0
Hydagen P	2.0
Euperlan PK776	10.0
Sodium chloride	1.5
Perfume	1.0
Citric acid 10% solution	0.8
Water	44.7
Note: WAS 15%	
Formula No. L610-16	

Cleansing Lotion, Pearly, Soap Free, Especially Skin Compatible

	<u>%W/W</u>
Texapon ASV	35.0
Dehyton K	15.0
Cutina EGMS	3.0
Comperlan LS	0.5
Perfume	0.5
Water	46.0
Note: WAS 16%	
Formula No. L610-18	

Cleansing Lotion, Pearly, Soap Free, Especially Skin Compatible

	<u>%W/W</u>
Texapon ASV	35.0
Dehyton K	15.0
Cutina EGMS	3.0
Perfume	0.5
Water	46.0
Note: WAS 15%	
Formula No. L610-19	

Cleansing Lotion, Cloudy

	<u>%W/W</u>
Texapon N25	50.0
Lamepon S	20.0
Lamesoft 156	5.0
Monomuls 90-L 12	2.0
Perfume	0.3
Water	22.7

Note: High viscous, tube filling, WAS 23%

Preparation: Monomuls 90-L 12 is dissolved in the Texapon N25 and Lamepon S while heat is applied. The other ingredients are then added in the order given above.

Formula No. L610-21

SOURCE: Henkel KGaA: Cosmetic Model Formulae

**Collagen and Cocoa Butter Skin Lotion**

	<b>%W/W</b>
A. Cetyl Alcohol	1.50
Lanolin, Anhydrous, USP	1.50
Kessco Glyceryl Monostearate, pure	0.50
Cocoa Butter	0.75
Acetulan (Cetyl Acetate (and) Acetylated Lanolin Alcohol)	2.00
Tween 60 (Polysorbate 60)	0.50
Arlacel 60 (Sorbitan Stearate)	0.50
Proto-Lan 8*	1.00
Propylparaben	0.20
B. Supro-Tein V (TEA-Cocoyl Hydrolyzed Collagen (and) Sorbitol)	0.50
Methylparaben	0.20
Glycerin	2.50
Gelamide 250F (milled) (Polyacrylamide)	0.20
Carbopol 934, 2% Aq. sol'n (Carbomer 934)	15.00
Deionized Water	67.70
C. Triethanolamine-99%	0.45
D. Collagen Native Extra 1% (Soluble Collagen)	5.00
Fragrance, color	q.s.
*(Lecithin (and) Butyl Stearate (and) Cocoyl Hydrolyzed Collagen (and) Oleoyl Sarcosine (and) Sesame Oil (and) Lanolin Alcohol)	

**Procedure:**

Pre-dissolve Gelamide in water phase. Add the rest of the ingredients to Phase B and heat to 70C. Heat Phase A separately X----->to 70C. Heat Phase A separately to 70C. Add Phase B to Phase A at 70C. Add the TEA, Phase C. Mix and cool to 40C. Add Phase D. Mix to incorporate.

**Properties:**

A superb, non-greasy, quick penetrating, skin softener and moisturizer. Use for hands, face, throat - wherever troublesome dry skin exists.

**SOURCE:** Maybrook Inc.: Formula #SK-2005

Conditioning Hand Lotion

This lotion moisturizes and softens the skin without leaving a greasy, heavy feel.

Part 1:	<u>Weight%</u>
Deionized Water	81.0
Pemulen TR-1 (1)	0.4
Glycerin	2.0
Methyl Paraben	0.1
Propyl Paraben	0.1
Part 2:	
White Petrolatum	1.0
Isopropyl Palmitate	2.5
Dimethicone	2.5
Triethanolamine (99%)	0.3
Part 3:	
Distearyldimonium Chloride (2)	0.1
Deionized Water	10.0
Part 4:	
Fragrance	q.s.
Color	q.s.

(1) BFGoodrich Co.

(2) Sherex Chemical Co. (Arosurf TA-100)

Procedure:

1. Combine deionized water, glycerin and parabens. With rapid agitation, sift the Pemulen TR-1 into the water phase ingredients. After the addition of resin, reduce agitation and continue mixing for approximately 30 minutes while heating the mixture to 70C.
2. Combine the oil phase ingredients in Part 2 and heat to 70C with mixing.
3. Form the emulsion by slowly adding the oil phase to the water phase with rapid agitation. Allow 15-20 minutes additional mixing time.
4. Disperse the Dimethyldimonium chloride into the available water in Part 3 and add this mixture to the emulsion, with mixing.
5. Add color, and fragrance as needed.

SOURCE: BFGoodrich Co.: Formula P0014



**Dry Skin Care Lotion**  
**(Formula 92-0729)**

<u>Part A:</u>	<u>% By Weight</u>
Deionized Water	74.43
Sorbitol 70%	3.00
Triethanolamine (99%)	1.85
Sodium Chloride	0.02

<u>Part B:</u>	
Mineral Oil	7.00
Petrolatum	3.00
Lanolin	3.00
Lanolin Alcohol	3.00
Stearic Acid	2.50
Cetyl Alcohol N.F.	1.75

<u>Part C:</u>	
Fragrance, Preservative	q.s.

**Blending Procedure:****Step 1 (Part A):**

Charge water into mixing vessel and add sorbitol, triethanolamine and sodium chloride. Heat with mixing to 70C.

**Step 2 (Part B):**

Charge "Part B" components into a vessel and heat with gentle mixing to 70-75C, being sure that all components are melted.

**Step 3:**

When both parts are at 70-75C, add "Part B" to "Part A" with good mixing, and mix fifteen minutes at 70C. After emulsion is homogeneous, begin cooling with moderate agitation.

**Step 4 (Part C):**

At 40C, add remainder of components and cool with agitation to 25C.

**Typical Formulation Properties:**

Appearance at 25C: Slightly off-white lotion  
 pH (10%): 7.5-8.0  
 Viscosity at 25C (RVT #5 @ 20 rpm): 15,000-20,000 cps

**CTFA Identification:**

Water, mineral oil, petrolatum, sorbitol, lanolin, lanolin alcohol, stearic acid, triethanolamine, cetyl alcohol, fragrance, preservative, sodium chloride.

**SOURCE:** Rhone-Poulenc Surfactants & Specialties: Formula 92-0729

Emollient Care Lotion

<u>Ingredient:</u>		<u>%W/W</u>
1	Cutina FS25	5.0
2	Cetiol B	9.0
3	Sipol 1618 C50	2.0
4	Cutina MD	2.0
5	KOH (20%)	1.75
6	Preservative	q.s.
7	Water	to 100.0

This formulation gives a viscous, medium weight O/W skin lotion.

The first four components are melted together at about 85C. Component 5 is dissolved in the water which is heated to the same temperature. The oil phase is then added to the water phase and dispersed. Mixing should continue down to about 35C. Formula TS 502

Cleansing Lotion

<u>Ingredient:</u>		<u>%W/W</u>
1	Emulgade SE	8.0
2	Cetiol B	9.0
3	Cetiol MM	4.0
4	Cyclomethicone 345	0.5
5	Natrosol (H.E.C.)	0.5
6	Preservative	q.s.
7	Water	to 100.0

This formulation gives a medium weight O/W skin lotion.

The first three components are melted together at about 85C. Component 5 is dissolved in the water which is heated to the same temperature. The oil phase is then added to the water phase, also at about 85C, and dispersed. Mixing should continue down to about 35C. The Cyclomethicone can then be added. Formula TS 503

Viscous Body Milk

<u>Ingredient:</u>		<u>%W/W</u>
1	Emulgade SE	7.0
2	Cegesoft C24	7.0
3	Novata AB	4.0
4	Preservative	q.s.
5	Water	to 100.0

This formulation gives a very light O/W skin lotion with a viscous consistency.

The first three components are melted together at about 85C. The oil phase is then added to the water phase, also at about 85C, and dispersed. Mixing should continue down to about 35C. Formulation TS 505

SOURCE: Henkel KGaA: Skin Care Project Formulations

**Emollient Fluid**

<u>Ingredient:</u>	<u>%W/W</u>
1 Cutina E24	2.0
2 Cetiol 1414E	5.0
3 Cutina MD	2.0
4 Sipol 1618 C50	2.0
5 Urea	3.0
6 Glycerine	2.0
7 Preservative	q.s.
8 Water	to 100.0

This formulation gives a high viscosity O/W Lotion with good emollience, and a very pleasant, light skin feel.

The first five components are melted together at about 85C. Components 6 & 7 are dissolved in the water and heated to the same temperature as the oil phase. The oil phase is then added to the water phase and dispersed. Mixing should continue down to about 35C.

Formula TS 451

**Cleansing Lotion**

<u>Ingredient:</u>	<u>%W/W</u>
1 Cutina E24	2.0
2 Cetiol 1414E	10.0
3 Cutina MD	2.0
4 Sipol 1618 C50	2.0
5 Urea	3.0
6 Glycerine	2.0
7 Preservative	q.s.
8 Water	to 100.0

This formulation gives an O/W lotion with good emollience, and a very pleasant skin feel.

The first five components are melted together at about 85C. Components 6 & 7 are dissolved in the water and heated to the same temperature as the oil phase. The oil phase is then added to the water phase and dispersed. Mixing should continue down to about 35C.

Formula TS 452

**SOURCE: Henkel KGaA: Skin Care Project Formulations**

Emollient Fluid

<u>Ingredient:</u>	<u>%W/W</u>
1 Eumulgin B2	1.5
2 Myritol 318	5.0
3 Eutanol G	5.0
4 Novata AB	4.0
5 Sipol 1618 C50	1.5
6 Cutina MD	3.5
7 Preservative	q.s.
8 Water	to 100.0

This formulation gives a light, viscous O/W lotion, with good emolliency.

The first six components are melted together at about 85C. The water is then heated to the same temperature as the oil phase. The oil phase is then added to the water phase and dispersed. Mixing should continue down to about 35C.  
Formula TS 461

General Hand and Body Lotion

<u>Ingredient:</u>	<u>%W/W</u>
1 Generol 122 E25	3.0
2 Eutanol G	10.0
3 Novata AB	5.1
4 Monomuls 60-35	5.0
5 Lorol C16	1.1
6 Lorol C18	1.1
7 Preservative	q.s.
8 Water	to 100.0

This formulation gives a fairly heavy O/W emollient lotion.

The first five components are melted together at about 85C. The water is heated to the same temperature as the oil phase. The oil phase is then added to the water phase and dispersed. Mixing should continue down to 35C.  
Formula TS 485

Hand & Body Lotion

<u>Ingredient:</u>	<u>%W/W</u>
1 Generol 122 E25	3.0
2 Eutanol G	10.0
3 Cetiol SB45	5.1
4 Monomuls 60-35	5.0
5 Sipol 1618 C50	2.2
6 Dow Corning 345 Fluid	4.0
7 Preservative	q.s.
8 Water	to 100.0

This formulation gives a low viscosity O/W emollient lotion.

The first five components are melted together at about 85C. The water is heated to the same temperature as the oil phase. The oil phase is then added to the water phase and dispersed. Mixing should continue down to about 35C. The volatile 345 Fluid can now be added and the product homogenised.  
Formula TS 486

SOURCE: Henkel KGaA: Skin Care Project Formulations

Emollient Lotion

	<u>%W/W</u>
A. Amerchol L-101 (Mineral Oil (and) Lanolin Alcohol)	3.00
Acetulan (Cetyl Acetate (and) Acetylated Lanolin Alcohol)	2.00
Stearic Acid T.P.	4.00
Mineral Oil, 70 vis.	15.00
*Proto-Lan 4R	2.50
Arlacel 165 (Glyceryl Stearate (and) PEG-100 Stearate)	1.50
B. Deionized Water	60.40
Glycerin	4.00
Triethanolamine	2.00
Methylparaben	0.20
Solulan L-575 (PEG-75 Lanolin)	5.00
Glydant (DMDM Hydantoin)	0.40
Fragrance, color	q.s.
*(Cocoyl Hydrolyzed Collagen (and) Mineral Oil (and) Hydrogenated Lanolin (and) Emulsifying wax N.F. (and) Myristyl Myristate)	

**Procedure:**

1. Heat Phases A and B separately to 80C.
2. Add Phase B to Phase A at 80C with agitation.
3. Mix and cool to 40C.
4. Add Phase C. Mix to incorporate.

**Properties:**

A water in oil emulsion which exhibits considerable slip in application. Highly emollient with considerable skin softening effects. An efficient moisturizer using the occlusive nature of mineral oil to trap moisture in the skin and the hygroscopic action of glycerin and collagen to attract moisture to the skin. Note: Addition of 2-3% Collagen Native Extra 1% (Soluble Collagen) makes this an excellent nutrient eye cream.

SOURCE: Maybrook Inc.: Formula #SK-2003

Emollient Lotion

A: Deionized Water	37.60%
Pecosil WDS-100 (Dimethicone Copolyol Phosphate)	3.00
Carbomer 934 (2% Aq.)	25.00
Propylene Glycol	5.00
Triethanolamine (99%)	0.70
B: Pelemol GMS (Glyceryl Stearate)	2.00
Meadowfoam Seed Oil	4.00
Pelemol ISL (Isostearyl Lactate)	7.20
Macademia Nut Oil	2.00
Cetearyl Alcohol	2.00
Pelemol BB (Behenyl Behenate)	0.50
Dimethicone (5,000 cs)	2.00
Pelemol OPG (Octyl Pelargonate)	8.00
C: Germaben II	1.00

Procedure:

Heat phase A to 70-75C. Heat phase B to 70-75C. Agitate both phase A and B until uniform. Under homogenization add phase B to phase A. When uniform, change to prop. agitation and cool to 45C. Add phase C to AB, and continue prop. agitation to 35C. Formula 14-110-A

Light Body Lotion  
(Cold Mix)

A: Deionized Water	50.10%
Pecosil PS-100 (Dimethicone Copolyol Phosphate)	3.00
Carbopol 934 (2% Aq.)	25.00
B: Pelemol ICB (Isocetyl Behenate)	10.00
Pelemol EE (Eicosyl Erucate)	10.00
C: Triethanolamine (99%)	0.90
D: Germaben II	1.00

Procedure:

Combine phase A with sweep agitation. Combine phase B. Under homogenization, add phase B to phase A. When uniform, switch to propeller agitation and add phase C then phase D. Formula 14-115-A

SOURCE: Phoenix Chemical, Inc.: Suggested Formulations

**Emollient Lotion**

<u>A</u>	Propylene Glycol	5.00%
	Deionized Water	71.88
	Magnesium Aluminum Silicate	0.75
	Xanthan Gum	0.25
<u>B</u>	Pecosil PS-200 (Dimethicone Copolyol Phosphate)	3.00
	NaOH (Sodium Hydroxide)	0.12
<u>C</u>	Pelemol GMS (Glyceryl Stearate)	5.00
	Pelemol ISB (Isostearyl Behenate)	5.00
	Pelemol 89 (Octyl Isononanoate)	5.00
	Cetearyl Alcohol	2.00
	Dimethicone (5000 cs)	1.00
<u>D</u>	Germaben II	1.00

**Procedure:**

1. Prewet Magnesium Aluminum Silicate and Xanthan Gum with the Propylene Glycol. 2. Homogenize this slurry into phase A water. 3. When phase A is uniform, add phase B to phase A with sweep agitation and heat AB to 70-75C. 4. Heat phase C to 70-75C with adequate agitation. 5. Homogenize phase C into AB. 6. When uniform, switch to sweep agitation and cool to 45C. 7. Add phase D and continue cooling and sweep agitation to 35C.

Formula 14-111-B

**Light Body Lotion**

<u>A</u>	Deionized Water	67.30%
	Pecosil PS-100 (Dimethicone Copolyol Phosphate)	2.70
	Carbomer 934 (2% Aq.)	10.00
	Xanthan Gum	0.30
	Germaben II	1.00
<u>B</u>	Pelemol SPO (Cetyl/Stearyl Octanoate)	9.00
	Pelemol DIA (Diisopropyl Adipate)	9.00
<u>C</u>	Triethanolamine (99%)	0.70

**Procedure**

With prop. agitation disperse Xanthan Gum in D.I. water. When uniform, add remainder of phase A items. Continue prop. agitation while adding phase B to phase A. Mix until uniform then add phase C. After A, B, and C are combined, homogenize to obtain finished lotion.

Formula 14-106-A

**SOURCE:** Phoenix Chemical, Inc.: Suggested Formulations

Face Lotion

	<u>%W/W</u>
Cetiol HE	3.0
Ethyl alcohol 96%	25.0
Henkel Glycerin 86% DAB 9	3.0
Cremogen witch hazel extract	3.0
Perfume, water-soluble	0.5
Water	65.5
Formula No. B51-01	

Herbal Face Lotion

	<u>%W/W</u>
Cetiol HE	2.0
Ethyl alcohol 96%	20.0
Sedaplant Richter	5.0
Henkel Glycerin 86% DAB 9	3.0
Water	70.0
Formula No. B51-02	

Herbal Face Lotion

	<u>%W/W</u>
Cetiol HE	2.0
Ethyl alcohol 96%	15.0
Hexaplant Richter	5.0
Henkel Glycerin 86% DAB 9	3.0
Water	75.0
Formula No. B51-03	

Herbal Face Lotion

	<u>%W/W</u>
Cetiol HE	2.0
Ethyl Alcohol 96%	30.0
Hexaplant Richter	5.0
Henkel Glycerin 86% DAB 9	2.0
Allantoin	0.2
Water	60.8
Formula No. B51-04	

Astringent Tonic

	<u>%W/W</u>
Cetiol HE	3.0
Henkel Glycerin 86% DAB 9	3.0
Ethyl alcohol 96%	25.0
Cremogen witch hazel extract	10.0
Perfume, water-soluble	0.3
Viscontran HEC 30 000 PR-2% solution	30.0
Water	28.7
Formula No. B51-05	

SOURCE: Henkel KGaA: Cosmetic Model Formulae



**Fragrance Lotion**

This glossy, white lotion imparts slight emolliency from a smooth, greaseless application.

<u>Ingredient (CTFA):</u>	<u>Weight%</u>	<u>Function</u>
<b>Part A:</b>		
Deionized Water	88.50	Diluent
Glycerin	4.00	Humectant
Dimethicone Copolyol (1)	0.30	Lubricant
Disodium EDTA	0.10	Chelating Agent
<b>Part B:</b>		
C12-15 Alcohols Benzoate (2)	3.00	Emollient/Fragrance Fixer
Fragrance, Noville #24093	2.00	
Oleth-10 (3)	0.20	Particle Size Reduction
Pemulen TR-1 (4)	0.25	Emulsifier
Carbopol 981 (5)	0.35	Thickener
<b>Part C:</b>		
Aminomethyl Propanol (95%) (6)	0.50	Neutralizing Agent
<b>Part D:</b>		
Propylene Glycol (and) Diazolidinyl Urea (and) Methylparaben (and) Propylparaben (7)	0.80	Preservative

- (1) 193 Surfactant (Dow Corning)
- (2) Finsolv TN (Finetex)
- (3) Procol OA-10 (Protameen Chemicals), Brij 96 (ICI)
- (4) Acrylates/C10-30 Alkyl Acrylate Crosspolymer (BFGoodrich)
- (5) Carbomer (BFGoodrich)
- (6) AMP-95 (Angus Chemical)
- (7) Germaben II (Sutton Labs)

**Preparation:**

1. Blend Part A ingredients in a vessel which will contain the entire formulation.
2. Blend Part B ingredients in a separate vessel. Pemulen and Carbopol should be slurried in this phase. Disrupt any soft lumps of these resins.
3. With moderate agitation, add Part B to Part A. Mix for 15-20 minutes. Add Part C and mix vigorously to produce a glossy, white product.
4. Mix Part D into emulsion.

**SOURCE:** BFGoodrich Co.: Formula P0005

Fragrance Lotion

<u>Ingredients:</u>	<u>% by Weight</u>
A. Deionized water	88.50
Glycerin	4.00
Dimethicone Copolyol	0.30
Disodium EDTA	0.10
B. C12-15 Alcohols Benzoate	3.00
Fragrance, Noville #24093	2.00
Oleth-10	0.20
Pemulen TR-1	0.25
Carbopol 981	0.35
C. AMP-95	0.50
D. Propylene Glycol (and) Diazolidinyl Urea (and) Methylparaben (and) Propylparaben	0.80

Procedure:

1. Blend Part A ingredients in a vessel which will contain the entire formulation.
2. Blend Part B ingredients in a separate vessel. Pemulen and Carbopol should be slurried in this phase. Disrupt any soft lumps of these resins.
3. With moderate agitation, add Part B to Part A. Mix for 15-20 minutes. Add Part C and mix vigorously to produce a glossy, white product.
4. Mix Part D into emulsion.

Formulation PF-0223 suggested by B.F. Goodrich

Emollient Lotion

<u>Ingredients:</u>	<u>% by Weight</u>
Part A:	
Water	83.80
Part B:	
Tromethamine magnesium aluminum silicate (Veegum Pro)	1.50
Part C:	
Triethanolamine	0.10
Glycerin	3.50
Part D:	
Mineral Oil	3.60
Petrolatum	0.40
Stearic Acid XXX	1.60
Cetyl alcohol	1.50
Glyceryl stearate SE	1.40
Cetyl acetate (and) acetylated lanolin alcohol	2.00
Dimethicone	0.60
Part E:	
Preservative, dye, fragrance	q.s.

Procedure:

Heat A to 70-75C; slowly add B while agitating at maximum available shear. Mix until smooth. Add C to AB with slow agitation until uniform. Maintain at 70-75C. Heat to 75-80C. Add D to ABC; mix until cool. Add E; package.

Formulation PF-0273 suggested by Vanderbilt

SOURCE: Angus Chemical Co.; Angus Product Formulary

Gentle Cleansing Lotion

A gentle, non-greasy cleanser designed to effectively dissolve makeup and impurities without disturbing the skin's natural moisture balance. Leaves skin feeling thoroughly cleansed, supple and moisturized. Ideal for dry or sensitive skin.

<u>Ingredients/Trade Name:</u>	<u>% by Weight</u>
A: Deionized Water	76.31
Sodium PCA/Ajidew N-50	0.50
Tetrasodium EDTA/Hamp-ene 220	0.05
Propylene Glycol	2.00
Methylparaben	0.20
TEA-Cocoyl Glutamate/Amisoft CT-12	10.00
PEG-40 Hydrogenated-Castor Oil/Cremophor RH-40	1.00
PEG-150 Distearate/Lipopeg 6000DS	1.00
PEG-78 Glyceryl Cocoate/Varionic LI-67	1.50
B: Glyceryl Stearate SE/Lexemul 55SE	2.50
Glycol Stearate/Lexemul EGMS	1.00
Cetearyl Alcohol/Lanette O	3.60
Propylparaben	0.10
C: Imidazolidinyl Urea/Germall 115	0.20
D: Fragrance/Manheimer #137G	0.04

Manufacturing Procedure:

Heat Phase A to 75C. Heat Phase B to 75C. Add Phase B to Phase A while mixing with good agitation. Mix for 20 minutes at 75C. Start cooling. At 50C, add Phase C. At 40C, add Phase D. Continue mixing and cooling to 30C.

Appearance: Opaque, white lotion

pH: 5.20-5.60

Viscosity: 1,700 to 2,500 cps (LVT #3 @ 12 rpm @ 25C)

Milk Lotion

(O) Liquid Paraffin (#70)	31.6 wt%
Paraffin Wax (mp 42-44C)	4.5
Cetyl Alcohol	4.5
Sorbitan Monostearate	1.8
Polyoxyethylene (20) Sorbitan Monooleate	2.8
Tocopherol Acetate	0.2
(W) Ajidew T-50	4.0
Water	50.5
Preservative	0.1

Procedure:

1. Heat (O) and (W) to 80C.
2. Add (W) to (O) with agitation.
3. Cool to 42C with stirring.

pH: 6.2

Viscosity: 25,000 cps

SOURCE: Ajinomoto USA, Inc.: Suggested Formulations

Hand Lotion

Thick white lotion. Absorbs well, is not greasy.

Material/CTFA-Index:

A: Mineral Oil	1.00%
Cetyl Alcohol	1.00
Stearic Acid	1.50
Belsil CM 030/Cyclomethicone	5.00
Belsil SDM 6022/Dimethicone (and) Stearoxy Dimethylsilane (and) Stearoxy Dimethyldisiloxane	23.00
B: Triethanolamine	0.80
Propylene Glycol	3.00
Wasser dest./Water	84.70
Preservatives, perfume	q.s.

Heat A and B each to 85C, stir A into B, cool whilst stirring.

Temperature stability: at 45C over 10 weeks.

Formulation 132 AH

Hand Lotion

Thick, white lotion. Easily spread, quickly absorbed.

Material/CTFA-Index:

A: Belsil SDM 6022/Dimethicone (and) Stearoxy Dimethylsilane (and) Stearoxy Dimethyldisiloxane	4.00%
Oleic Acid	1.50
B: Morpholine	0.30
Wasser dest./Water	89.20
C: Carbopol 934 Lsg 2%isg/Carbomer 934	5.00
Preservatives, perfume	q.s.

Heat A and B to 60C, mix together whilst stirring quickly. Mix C to AB at 45C under high shear conditions. Fill at over 40C.

Temperature stability: 8 weeks at 45C.

Formulation 156 AH

SOURCE: Wacker Silicone: Suggested Formulations

Hand LotionMaterial/CTFA-Index:

Water	78.30%
Carbopol 934/Carbomer 934	0.40
Mineral Oil (high viscosity)	8.50
Belsil CM 1000/Cyclomethicone(a.)Dimethiconol	11.50
Tris Amino/Tromethamine	0.20
Preservatives, perfume, pigments	q.s.

Add Carbopol 934 to water with good agitation. Add the other ingredients in this order.

Temperature stability: at 45C 8 weeks.

SOURCE: Wacker Silicone: Formulation 340 AH

Gentle Cleansing Lotion

A gentle, non-greasy cleanser designed to effectively dissolve makeup and impurities without disturbing the skin's natural moisture balance. Leaves skin feeling thoroughly cleansed, supple and moisturized. Ideal for dry or sensitive skin.

<u>Ingredients/Trade Name</u>	<u>% by Wt</u>
A) Deionized Water	76.31
Sodium PCA/Ajidew N-50	0.50
Tetrasodium EDTA/Hamp-ene 220	0.05
Propylene Glycol	2.00
Methylparaben	0.20
TEA-Cocoyl Glutamate/Amisoft CT-12	10.00
PEG-40 Hydrogenated-Castor Oil/Cremophor RH-40	1.00
PEG-150 Distearate/Lipopeg 6000DS	1.00
PEG-78 Glyceryl Cocoate/Varionic LI-67	1.50
B) Glyceryl Stearate SE/Lexemul 55SE	2.50
Glycol Stearate/Lexemul EGMS	1.00
Cetearyl Alcohol/Lanette O	3.60
Propylparaben	0.10
C) Imidazolidinyl Urea/Germall 115	0.20
D) Fragrance/Manheimer #137G	0.04

Manufacturing Procedure:

Heat phase A to 75C. Heat phase B to 75C. Add phase B to phase A while mixing with good agitation. Mix for 20 minutes at 75C. Start cooling. At 50C, add phase C. At 40C, add phase D. Continue mixing and cooling to 30C.

Appearance: Opaque, white lotion

pH: 5.20-5.60

Viscosity: 1,700 to 2,500 (LVT #3 @ 12 rpm @ 25C)

SOURCE: Ajinomoto USA, Inc.: Suggested Formulation

**Intensive Treatment Lotion**  
(Formula 91-1101)

<u>Water Phase:</u>		<u>% By Weight</u>
<u>W-1</u>	Water	84.25
	Glycerine (99%)	3.50
	Propylene Glycol	0.15
	Cheelox 100 (Dow)	0.10
<u>W-2</u>	Carbopol 934 (Goodrich)	0.20
<u>W-3</u>	Rhodigel EZ	0.15
<u>W-4</u>	Triethanolamine (99%)	1.35
<u>Oil Phase:</u>		
	Drakeol 9 (Penreco)	3.50
	Stearic Acid TP	1.50
	Alkamuls EGMS	1.50
	Alkamuls SPS	1.00
	Alkamuls GMS	1.00
	Cetyl Alcohol NF	1.50
	Mirasil DM 300	0.20
	Solulan 75 (Amerchol)	0.10
Fragrance, Dye, Preservative		Q.S.

Blending Procedure:

- (1) Combine W-1 ingredients and heat to 50-55C.
- (2) With vigorous agitation, lightly sift W-2 into heated W-1. Continue heating system to 75-80C. Mix until uniform.
- (3) With rapid but smooth agitation, slowly blend W-3 into heated system. Mix until completely dispersed.
- (4) Slowly blend W-4 into heated water system. The system should thicken noticeably with this addition.
- (5) In a separate mixing vessel, combine Oil Phase ingredients. With smooth agitation, warm to 75-80C (avoid scorching).
- (6) With rapid but smooth agitation, slowly blend the heated Oil Phase into the heated (75-80C) Water Phase. Mix until completely uniform.
- (7) With moderate agitation, slowly cool system to 35-40C and add compatible Fragrance, Dye(s), and Preservative.

Typical Formulation Properties

Appearance After 24 Hrs:	Smooth, Opaque Lotion
% Non Volatiles:	14.5-16.5
pH (10% Aq.):	7.5-9.0

CTFA Identification: Water, Glycerine, Mineral Oil, Glycol Stearate, Cetyl Alcohol, Stearic Acid, Triethanolamine, Cetyl Esters, Glyceryl Stearate, Dimethicone, Carbomer 934, Xanthan Gum, Propylene Glycol, PEG-75 Lanolin, Tetrasodium EDTA, Fragrance, Preservative, Dye(s).

**SOURCE:** Rhone-Poulenc Surfactants & Specialties: Formula 91-1101

Light Protective Day Lotion

<u>Ingredient:</u>	<u>%W/W</u>
1 Cutina MD	3.5
2 Sipol 16-18 C50	1.5
3 Cetiol MM	4.0
4 Eumulgin B2	1.5
5 Eutanol G	5.0
6 Myritol 318	5.0
7 Eusolex 6300	0.75
8 Repair Complex CLR	5.0
9 Elastin CLR	2.0
10 Preservative	q.s.
11 Water	to 100.0

This formulation gives a lightweight O/W lotion, with a high viscosity, which helps to protect the skin from harmful UV Rays, and also aids skin cell removal. The first seven components are heated together to 85C. The water is heated to the same temperature. The oil phase is then mixed into the water phase and dispersed. Mixing should continue down to about 35C. Components eight and nine can then be incorporated, and the product homogenised.

Formula TS 255

Pearlescent Lotion

<u>Ingredient:</u>	<u>%W/W</u>
1 Cutina E24	5.0
2 Cetiol B	5.0
3 Myritol 318	2.0
4 Monomuls 90 L12	5.0
5 Sipol 1618 C50	2.0
6 Cetiol MM	5.0
7 Carbopol 980	0.1
8 NaOH (10%)	0.4
9 Glycerine	5.0
10 Preservative	q.s.
11 Water	to 100.0

This formulation gives a moderately viscous O/W skin lotion with pearl sheen appearance.

The first six components are melted together at about 85C. Component 7 is dissolved in half the water with vigorous mixing. Components 8 & 9 are dissolved in the other half. The two halves of the water phase are added together and heated to the same temperature as the oil phase. The oil phase is then added to the water phase and dispersed. Mixing should continue down to about 35C. The pearl appearance begins to develop after a few hours.

Formula TS 441

SOURCE: Henkel KGaA: Skin Care Project Formulations

Low Solids Mild Cationic Lotion

The following formulation is an ideal starting point for face, body, or baby skin moisturizers. It is a low solids (7.67 by weight) version of SC-183 possessing the same feel characteristics - a pleasant cushiony feel, no tacky water phase, and a moist rubdown. It dries more quickly, with a powdery cationic long lasting after feel.

Part A:	%
Incroquat Behenyl TMS (Behentrimonium Methosulfate (and) Cetearyl Alcohol)	1.17
Polawax (Emulsifying Wax NF)	1.00
Crodacol S-95 (Stearyl Alcohol)	0.33
Crodamol PMP (PPG-2 Myristyl Ether Propionate)	1.00
Crodamol PTC (Pentaerythrityl Tetra Caprate)	0.67
Carnation Mineral Oil	1.00
Snow White Petrolatum	2.00
Dimethicone 200SF (350 cps)	0.50
Part B:	
Water, deionized	82.33
Glycerin	8.00
Part C:	
Germaben II	1.00
Hydrolyzed Wheat Protein	1.00

Procedure:

Combine ingredients of Part A with mixing and heat to 75C. Combine ingredients of Part B with mixing and heat to 75C. Add Part B to Part A with good mixing. Continue mixing and cool to 45C. Add Part C with mixing and cool to desired fill temperature.

SOURCE: Croda, Inc.: Formula SC-192-1

Normal Skin Lotion

A light emollient lotion for hand, body and facial use. Applies easily, spreads on skin without drag, and is rapidly absorbed.

	Wt. %
A. Glyceryl Stearate (and) PEG 100 Stearate (ICI, Arlacel 165)	5.0
Stearic Acid, TP	1.0
Mink Oil (Emulan, Light Fraction)	5.0
PEG-5 Soya Sterol (Henkel, General 122E5)	2.0
Soy Sterol (Henkel, General 122)	1.0
B. Water	84.8
C. Germaben II (Sutton)	1.0
Fragrance	0.2

Procedure:

Add 75C Phase B to 75C Phase A via propellor agitation. Stir cool to 45C. Add Phase C.

SOURCE: Emulan, Inc.: Suggested Formulation



Lubriderm Type Lotion

	<u>Wt%</u>
Distilled Water	78.10
Ritavena 5	0.50
Sorbitol 70% Soln.	3.50
Forlan 500	6.00
Cetyl Alcohol	0.70
Mineral Oil	8.00
Stearic Acid	2.00
Methylparaben	0.15
Propylparaben	0.05
TEA (50%)	1.00

pH: 7.8

Viscosity: 3835 cps

Stabilities:

Freeze/Thaw: v. sl. sep. after 1 cycle

40F: no change after 6 weeks

110F: separation after 3 weeks

Description of System: oil/0.5% Ritavena 5

Centrifuge Results after 7 Min @ 1660rpm: very slight

Formula 111-187

Lubriderm Type Lotion

	<u>Wt%</u>
Distilled Water	77.60
Ritavena 5	1.00
Sorbitol 70% Soln.	3.50
Forlan 500	6.00
Cetyl Alcohol	0.70
Mineral Oil	8.00
Stearic Acid	2.00
Methylparaben	0.15
Propylparaben	0.05
TEA (50%)	1.00

pH: 8.0

Viscosity: 4350 cps

Stabilities:

Freeze/Thaw: no change after 3 cycles

40F: no change after 6 weeks

110F: separation after 4 weeks

Description of System: oil/1% Ritavena 5

Formula 111-188

SOURCE: R.I.T.A. Corp.: RITAVENA 5 Suggested Formulations

Lubriderm Type Lotion with Ritavena 5

<u>Ingredients:</u>	<u>%W/W</u>
Part A:	
1. Distilled Water	67.60
2. Sorbitol 70% Solution	3.50
Part B:	
3. Distilled Water (100C)	10.00
4. Ritavena 5	1.00
Part C:	
5. Forlan 500	6.00
6. Rita C	0.70
7. Mineral Oil 85/95	8.00
8. Stearic Acid	2.00
9. Methylparaben	0.15
10. Propylparaben	0.05
Part D:	
11. Triethanolamine (50%)	1.00

Compounding Procedure:

Heat Part A and Part C to 165F. Combine with agitation. Add Part D and maintain heat for 10 minutes. Premix Part B in a blender for 2 minutes. Add to mixture. Mix until uniform. Cool with agitation to 95F.  
Formula 111-188

Low Solids Anionic Lotion with Ritavena 5

<u>Ingredients:</u>	<u>%W/W</u>
Part A:	
1. Distilled Water (100C)	10.00
2. Ritavena 5	2.00
Part B:	
3. Distilled Water	72.62
4. Propylene Glycol	5.00
5. Rita CA	3.00
6. Pationic ISL	2.00
7. Tauranol I-78-6	1.25
8. Patlac IL	1.00
9. Patlac NAL	1.00
10. Glycerin	1.00
11. Ritapro 165	0.40
12. Methylparaben	0.15
13. Propylparaben	0.15
Part C:	
14. Germall II	0.20
15. Perfume	0.10
16. Color	0.03
17. Patlac LA (44% Solution)	0.20

Compounding Procedures:

Heat Part B to 165F with agitation. Maintain 165F for 10 minutes. Premix Part A in a blender for 2 minutes. Add to Part B. Mix until uniform. Cool with agitation to 120F. Add Part C. Cool to 95F. Adjust pH to 5.0+/-0.2 with Patlac LA (44% Solution).  
Formula 111-201

SOURCE: R.I.T.A. Corp.: RITAVENA 5 Suggested Formulations

Mild Lotion with Amihope

<u>Ingredients:</u>	<u>% by Weight</u>
Phase A:	
Mineral Oil	5.00
Amiteer LGOD (Di-Octyldodecyl Lauroyl Glutamate)	2.00
Propylene Glycol Stearate	0.50
PEG-5 Hydrogenated Castor Oil	1.50
PEG-5 Glyceryl Stearate	2.50
Butylparaben	0.10
Amihope-LL	3.00
Phase B:	
Acylglutamate HS-11	0.30
Carbomer 941	0.20
Sodium Hydroxide	0.08
Butylene Glycol	5.00
Methylparaben	0.20
Water	79.62

Procedure:

Dissolve Carbomer 941 and sodium hydroxide in water first. Add all other ingredients of Phase B to the solution and dissolve at 75 to 80 degrees centigrade.

Dissolve Phase A ingredients at 80 degrees centigrade. When both phases are at 80 degrees Centigrade add A to B with agitation.

Cool down to room temperature while continuing mixing.

This lotion has a smooth feeling and good spreadability.

Formula No. NON-404

W/O Lotion With Eldew

<u>Ingredients/Trade Name:</u>	<u>% by Weight</u>
Part A:	
Di-(Cholesteryl, behenyl, octyldodecyl)	
N-Lauroyl-L-glutamic acid ester/Eldew CL-301	2.00
Cetearyl Octanoate	10.00
C12-C15 Alkyl Benzoate	5.00
Phenoxyethanol	0.60
Tocopherol Acetate	0.05
Part B:	
Polyglyceryl-4 Isostearate (and) Cetyl Dimethicone	
Copolyol (and) Hexyl Laurate	5.00
Cetyl Dimethicone	3.00
Part C:	
Deionized Water	65.55
Sodium Chloride	0.80
Glycerin (99.5%)	5.00
Partially Deacetylated Chitin (1.0%)/Marine Dew	2.00
Part D:	
Methylparaben	0.20
Butylene Glycol	0.80

Procedure:

Pre-melt Part A at 50 degrees Centigrade. Add Part B to Part

A. Pre-melt Part D by heating to 50 degrees C. Add to Part C.

Slowly add Part C and D mixture to Parts A and B with high shear mixing.

SOURCE: Ajinomoto USA, Inc.: Suggested Formulations

**Moisturizing Hand and Body Lotion**

<u>Ingredient:</u>	<u>%W/W</u>
1 Cutina MD	3.5
2 Stenol 16-65	1.2
3 Eumulgin B2	2.0
4 Eutanol G	4.5
5 Hygroplex HHG (CLR)	2.0
6 Preservative	q.s.
7 Water to	100.0

This formulation gives a light O/W lotion, with a low viscosity, which helps to stimulate the skin's natural regenerative powers.

The first four components are heated together to 85C. Component five is then added to the water and this mixture is also heated to 85C. The oil phase is then mixed into the water phase and dispersed. Mixing should continue down to about 35C.

Formula TS 116

**Regenerative Lotion**

<u>Ingredient:</u>	<u>%W/W</u>
1 Emulgade CL special	20.0
2 Repair Complex CLR	10.0
3 Preservative	q.s.
4 Water to	100.0

This formulation gives a medium weight O/W cream which helps to stimulate the skin's natural regenerative powers.

The Emulgade is added to the water and the mixture is heated to about 85C. The Emulgade is then dispersed. Mixing should continue down to about 35C when the Repair Complex can be added.

Formula TS 230

**Sunflower Oil Body Lotion**

<u>Ingredient:</u>	<u>%W/W</u>
1 Generol 122 E10	9.8
2 Monomuls 60-35	5.0
3 Cetiol SB45	5.0
4 Sunflower Oil	10.0
5 Henkel Glycerine	5.0
6 Preservative	q.s.
7 Water to	100.0

This formulation gives a heavy O/W Lotion which has an attractive pearl sheen appearance. It is of medium consistency with a caring skin feel.

The first four components are heated together to 85C. Component five is dissolved in the water and this mixture is also heated to 85C. The oil phase can then be added to the water phase and dispersed. Mixing should continue down to about 35C.

Formula TS 412

SOURCE: Henkel KGaA: Skin Care Project Formulations

**Moisturizing Lotion**

This lotion exhibits the soft feel and emolliency of a traditional stearate soap formulation without the greasiness and potential irritation. It is easily absorbed and is formulated to give a pH of 6.

**Ingredient (CTFA):**

	<b><u>Weight%</u></b>	<b><u>Function</u></b>
<b>Part A:</b>		
Deionized Water	72.20	Diluent
Hydroxypropyl Methylcellulose (1) (1.0% Solution)	10.00	Aqueous Smooth- ing Aid
Glycerin	2.00	Humectant
Disodium EDTA	0.05	Chelating Agent
<b>Part B:</b>		
Petrolatum	5.00	Moisture Barrier
Mineral Oil (2)	3.00	Moisture Barrier
Glycol Stearate	2.00	Emollient/ Opacifier
Isostearyl Benzoate (3)	2.00	Emollient
Paraffin	2.00	Opacifier
Dimethicone (100 cs.)	0.50	Lubricant
Pemulen TR-1 (4)	0.30	Emulsifier/ Stabilizer
<b>Part C:</b>		
Triethanolamine (99%)	0.25	Neutralizing Agent

**Part D:**

Propylene Glycol (and) Diazolidinyl Urea (and) Methylparaben (and) Propylparaben (5)	0.70	Preservative
(1) Methocel E4M (Dow Chemical)		
(2) Drakeol 7 (Penreco)		
(3) Finsolv SB (Finetex)		
(4) Acrylates/C10-30 Alkyl Acrylate Crosspolymer (BFGoodrich)		
(5) Germaben IIE (Sutton Labs)		

**Preparation:**

1. Combine Part A ingredients. Mix until homogeneous.
2. Combine all Part B ingredients except Pemulen in a separate vessel. Heat both phases to 60-65C.
3. Confirm that Part B is homogeneous and at the specified temperature. Add Pemulen to this phase. Agitate to break-up soft lumps of resin. With vigorous agitation, promptly add Part B to Part A. Maintain temperature at 60C.
4. Mix for 15-30 minutes or until a smooth, non-grainy dispersion is apparent. Add Part C (triethanolamine) and discontinue heating. Continue vigorous agitation to produce a smooth product.
5. When the temperature falls to 40-45C add Part D. Continue mixing until the product temperature is 30-35C. Cease agitation and fill containers.

SOURCE: BF Goodrich Co.; Formula P0001

Moisturizing Lotion

<u>Ingredients:</u>	<u>% by Weight</u>
Part A:	
Deionized water	72.25
Hydroxypropyl Methylcellulose (1.0% solution)	10.00
Glycerin	2.00
Disodium EDTA	0.05
Part B:	
Petrolatum	5.00
Mineral Oil	3.00
Glycol Stearate	2.00
Isostearyl Benzoate	2.00
Paraffin	2.00
Dimethicone (110 cs.)	0.50
Pemulen TR-1	0.30
Part C:	
AMP-95	0.20
Part D:	
Propylene Glycol (and) Diazolidinyl Urea (and) Methyl- paraben (and) Propylparaben	0.70

Procedure:

Combine A ingredients. Mix until homogeneous. Combine all B ingredients except Pemulen in a separate vessel. Heat both phases to 60-65C. Confirm that B is homogeneous and at the specified temperature. Add Pemulen to this phase. Agitate to break-up soft lumps of resin. With vigorous agitation, promptly add B to A. Maintain temperature at 60C. Mix for 15-30 minutes or until a smooth non-grainy dispersion is apparent. Add C and discontinue heating. Continue vigorous agitation to produce a smooth product. When the temperature falls to 40-45C add D. Continue mixing until the product temperature is 30-35C. Cease agitation and fill containers.

SOURCE: Angus Chemical Co.: Angus Product Formulary: Formulation PF-0224 suggested by B.F. Goodrich

Body LotionMaterial/CTFA-Index:

A: Hostacerin WO/Polyglyceryl-2 Sesquiisostearate (and) Beeswax (and) Mineral Oil (and) Magnesium Stearate (and) Aluminum Stearate	8.00%
Belsil CM 1000/Cyclomethicone (and) Dimethiconol	10.00
Isopropyl Palmitate	10.00
B: Water	72.00
Preservatives, perfume, pigments	q.s.

W/O Lotion

Heat A and B to 75-80C. Stir B into A.

Temperature stability: at 45C 8 weeks.

SOURCE: Wacker Silicone: Formulation 813 AH

**Moisturizing Lotion**  
**(Formula 87-0805M)**

<u>Water Phase:</u>	<u>% By Weight</u>
Propylene Glycol	2.50
Carbopol 934 (Goodrich)	0.25
Sodium Hydroxide (50% Aq.)	0.13
D.I. Water	89.47
<u>Oil Phase:</u>	
Alkamuls MM/M	2.00
Alkamuls GMS	1.50
Alkamuls SS	0.35
Dermalcare NI	1.50
Stearic Acid TP	2.30
Fragrance, Dye(s), Preservative	Q.S.

**Blending Procedure:** Combine Propylene Glycol and water and heat to 75-80C. With vigorous agitation, slowly sift Carbopol 934 into heated water system. Once Carbopol 934 is completely dispersed, slowly blend in Sodium Hydroxide (50%) solution. In a separate mixing vessel, combine Oil Phase ingredients. With smooth agitation, heat Oil Phase to 75-80C (avoid scorching). With rapid but smooth agitation, slowly blend molten Oil Phase into heated Water Phase. Mix until completely uniform. With smooth agitation, slowly cool system to 35-40C and add compatible Fragrance, Dye(s), and Preservative.

**Typical Formulation Properties**

Appearance After 24 Hrs:	Viscous, Opaque Lotion
% Non Volatiles:	9-11

**Hand & Body Lotion**  
**(Formula 89-0903M)**

<u>Water Phase:</u>	<u>% By Weight</u>
Glycerine	0.50
Triethanolamine (99%)	1.20
Versene 100 (Dow)	0.10
D.I. Water	83.20
<u>Oil Phase:</u>	
Alkamuls GMS	2.50
Alkamuls LVL	2.00
Alkamuls MM/M	5.00
Cetyl Alcohol NF	2.50
Stearic Acid TP	3.00
Fragrance, Dye(s), Preservative	Q.S.

**Blending Procedure:** Combine Water Phase ingredients and heat to 75-80C. In a separate mixing vessel, combine Oil Phase ingredients and, with smooth agitation, heat to 75-80C (Avoid Scorching). With rapid but smooth agitation slowly blend heated Oil Phase into heated Water Phase. Mix until completely uniform. With smooth agitation, cool to 40C and blend in compatible Fragrance, Dye(s), and Preservative.

**Typical Formulation Properties**

Appearance After 25 Hrs:	Opaque Lotion
% Non Volatiles:	16-18

SOURCE: Rhone-Poulenc Surfactants & Specialties: Formulas

Moisturizing Skin LotionOil Phase:

Glucam P-20	3.0g
Britol 7 (Mineral Oil)	4.5g
Pelan AC (Cetyl Acetate & Acetylated Lanolin Alcohol)	2.0g
Pelemol GMS (Glyceryl Monostearate)	1.0g
Phoenate 200 DL (PEG-4 Dilaurate)	0.5g

Water Phase:

Pecogel H-12 (PVP/Polycarbamyl Polyglycol Ester)	10.0g
Phenoxol T (Cetearyl Alcohol & Ceteareth 20)	2.0g
DL Carboxypyrrolidone	1.0g
Water	76.0g

Procedure:

Heat oil and water phases to 80C. Add oil phase to water phase at temperature with agitation and continue agitation while cooling. Perfume and stabilizers can be added when temperature cools to 40C.

Part of the mineral oil can be replaced with petroleum jelly for a thicker formulation.

Emollient Skin Lotion

<u>A</u> Deionized Water	76.00%
Propylene Glycol	5.00
Glycerin	2.50
<u>B</u> Pelemol ICB (Isocetyl Behenate)	10.00
Pelemol ISB (Isostearyl Behenate)	2.00
Pelemol BB (Behenyl Behenate)	0.25
Pelemol GTB (Glyceryl Tribehenate)	0.25
Phenoxol T (Cetearyl Alcohol (and) Ceteareth-20)	1.50
Cetearyl Alcohol	1.50
<u>C</u> Phenoxyethanol (and) Methylparaben (and)	1.00
Ethylparaben (and) Propylparaben (and)	
Butylparaben (Phenonip)	

Procedure:

Heat phase A to 70-75C. Heat phase B to 70-75C with adequate agitation. Homogenize phase B into phase A. Switch to propeller agitation and cool AB to 45C. Add phase C to AB with continued propeller agitation. When ABC reaches 35C, stop.

Formula 14-63-D

SOURCE: Phoenix Chemical, Inc.: Suggested Formulations



Natural Collagen, Aloe and Lanolin Hand Lotion

	%W/W
A. Deionized Water	69.00
Tetrasodium EDTA	0.05
Carbopol 934, 2% Aq. sol'n (Carbomer 934)	7.00
Methylparaben	0.30
Propylparaben	0.15
Triethanolamine-99%	2.00
Propylene Glycol	2.50
Collagen Hydrolyzate Cosmetic 55 (Hydrolyzed Collagen)	1.00
B. Diisopropyl Adipate	2.00
Stearic Acid	4.00
Cetyl Alcohol	1.00
Anhydrous Lanolin, USP (Lanolin)	5.00
Amerchol L-101 (Mineral Oil (and) Lanolin Alcohol)	5.00
C. Aloe Vera Gel	1.00
Fragrance, color	q.s.

**Procedure:**

1. Heat Phases A and B separately to 75C.
2. Add A to B at 75C with adequate mixing.
3. Mix and cool to 40C.
4. Add Phase C. Mix to incorporate.

**Properties:**

Incorporates three of the most beneficial youth-giving ingredients known--Lanolin, Hydrolyzed Collagen and Aloe. Penetrates quickly into the skin to leave a soft, silky afterfeel. Cost effective, but with strong marketing appeal.

SOURCE: Maybrook Inc.: Formula #SK-2020

O/W Broad-Spectrum Protective Moisturizing Lotion with Vitamins

<u>Ingredients:</u>	<u>% by Weight</u>
A. Parsol MCX	2.00
Parsol 1789	1.00
Parsol 5000	0.60
Glyceryl Monostearate	2.00
Cetyl Alcohol Extra	2.00
Dermol 185	6.00
Antaron V-220 (Ganex V-220)	2.00
Prisorine 3505	2.00
Butylated Hydroxytoluene	0.05
Edeta BD	0.10
Phenonip	0.60
Amphisol A	1.50
B. Deionized Water	10.00
AMP 10% sol'n	3.97
C. Deionized Water	21.31
Propylene Glycol	5.00
Carbopol 981 1% sol'n	10.00
AMP 10% sol'n	1.02
D. Deionized Water	20.00
Parsol HS	0.60
AMP 10% sol'n	1.80
E. Vitamin E Acetate	2.00
F. Ropufa 25 N-6 Oil	2.00
G. Panthenol	2.00
H. Ponceau Red SX 0.2% sol'n	0.05
I. Perfume (Parfex 49915)	0.40

**Remarks:**

- While not a sunscreen, this formulation scored an SPF 8 when tested according to the FDA/OTC method (range-finding assay on six subjects. IRI Ref. 582627).
- Dermatologically tested perfume for sunscreens.

**Procedure:**

Heat part A to 85C while stirring. When homogeneous, add part B pre-heated to 75C, while mixing. Add part C pre-heated to 75C, while mixing. Then add part D pre-heated to 60C. Cool to 40C, add parts E, F, G, H, and I. Compensate for water loss and continue stirring while cooling to ambient temperature.

SOURCE: Angus Chemical Co.: Angus Product Formulary: Formulation PF-0312E suggested by Givaudan-Roure SA

O/W Hand and Body Lotion

<u>Ingredients:</u>	<u>%W/W</u>	<u>Function</u>
1. Distilled/Deionized Water	80.30	----
2. Acritamer 934 (Carbomer)	0.10	Viscosity
3. Glycerine	4.00	Humectant
4. Tetrasodium EDTA	0.05	Stability
5. Methylparaben	0.20	Preservative
6. Rita GMS (Glyceryl Stearate)	3.20	Emulsifier
7. Rita Stearic Acid	3.00	Emulsifier
8. Ritachol (Mineral Oil and Lanolin Alcohol)	3.00	Feel
9. Rita CA (Cetyl Alcohol)	1.40	Emulsifier
10. Ritachol 1000 (R.I.T.A. Blend)	0.60	Emulsifier
11. Ritaderm (R.I.T.A. Blend)	2.00	Moisturizing
12. Rita IPP (Isopropyl Palmitate)	0.50	Emollient
13. Propylparaben	0.10	Preservative
14. Triethanolamine @ 50%	1.20	pH
15. Glydant	0.25	Preservative
16. Fragrance	0.10	Odor

Compounding Procedure:

To water sift in item 2. Agitate until uniform. Then weigh in items 3-5 and begin heating to 70C. In another vessel weigh items 6-13 and heat to 70C. To water blend add item 14. After neutralization add oil phase with continuous agitation. Cool and add fragrance.

Ref. No. 119-96

Lanolin Hand and Body Lotion

Creamy texture, lanolin based lotion which absorbs quickly and does not leave a greasy residual film.

<u>Ingredients:</u>	<u>%W/W</u>	<u>Function</u>
1. Distilled/Deionized Water	72.37	----
2. Acritamer 941 (Carbomer)	0.05	Viscosity
3. Propylene Glycol	5.00	Humectant
4. Methylparaben	0.10	Preservative
5. Triethanolamine @ 50%	1.48	pH
6. Rita Stearic Acid	2.60	Emulsifier
7. Mineral Oil (70 vis.-Penreco)	8.00	Emolliency
8. Ritaderm (R.I.T.A. Blend)	2.75	Moisture
9. Lanolin, Xtra Deo (R.I.T.A. Lanolin)	1.00	Protection
10. Propylparaben	0.05	Preservative
11. Ritachol (Mineral Oil and Lanolin Alcohol)	4.00	Feel
12. Rita GMS (Glyceryl Stearate)	2.00	Emulsifier
13. Rita CA (Cetyl Alcohol)	0.30	Emulsifier
14. Fragrance	0.10	Odor
15. Glydant	0.20	Preservative

Compounding Procedure:

Weigh item 1 and sift in item 2 until completely dispersed. Add items 3-4 and begin heating to 70C. In another container weigh and add ingredients 6-13 and heat to 70C. Add oil phase to water phase. Add item 5. Mix for 10-15 minutes. Begin cooling, then add fragrance and preservative.

Ref. No. 119-98

SOURCE: R.I.T.A. Corp.: Skin Care Formulary

Washing Lotion  
Clear, 15.3% active ingredient

Recipe:

A	Genapol ZRO liquid	35.00%
	Sodium Laureth Sulfate	
B	Hostapon KCG	8.00%
	Sodium Cocoyl Glutamate	
	Genapol AMG	5.00%
	Magnesium-PEG-3 Cocamide Sulfate	
	Perfume	0.50%
	Water	39.50%
	Dyestuff solution	q.s.
	Preservative	q.s.
	Genagen CAB	8.00%
	Cocamidopropyl Betaine	
	Genapol L-3	2.00%
	Laureth-3	
C	Sodium chloride	2.00%

Procedure:

- I Add one after another the components of B to A.  
 II If necessary adjust the pH.  
 III Finally adjust the viscosity with C.

Formula A II/4010

Washing-Lotion  
Clear, 10.5% active ingredient

Recipe:

A	Genapol AMG	20.00%
	Magnesium-PEG-3 Cocamide Sulfate	
B	Hostapon KCG	6.00%
	Sodium Cocoyl Glutamate	
	Glucamate DOE 120	1.00%
	PEG-120 Methyl Glucose Dioleate	
	Perfume	0.30%
	Water	62.70%
	Dyestuff solution	q.s.
	Preservative	q.s.
	Genagen CAB	10.00%
	Cocamidopropyl Betaine	

Procedure:

- I Add one after another the components of B to A.  
 II If necessary adjust the pH.

Formula A II/4019

SOURCE: Hoechst: Guide Formulations for Cosmetics &amp; Toiletries

**Washing-Lotion**

With bacteriostatic effect, clear, 10.5% active ingredient

**Recipe:**

A	Octopirox	0.20%
	Piroctone Olamine	
B	Genapol AMG	20.00%
	Magnesium-PEG-3 Cocamide Sulfate	
C	Hostapon KCG	6.00%
	Sodium Cocoyl Glutamate	
	Glucamate DOE 120	1.00%
	PEG-120 Methyl Glucose Dioleate	
	Perfume	0.30%
	Dyestuff solution	q.s.
	Preservative	q.s.
D	Allantoin	0.20%
E	Water	62.30%
F	Genagen CAB	10.00%
	Cocamidopropyl Betaine	

**Procedure:**

- I Dissolve A in B.
  - II One after another the components of C are added to I.
  - III Dissolve D in warmed E.
  - IV Stir III into II.
  - V If necessary adjust the pH.
  - VI Finally adjust the viscosity with F.
- Formula A II/4020

**Handwashing-Paste**

Clear, gel type, with solvent, 21.2% active ingredient

**Recipe:**

A	Genapol UD-030	5.00%
	Undeceth-3	
	Oleic acid	4.00%
	Triethanolamine	2.00%
	Preservative	q.s.
B	Genapol ZRO liquid	15.00%
	Sodium Laureth Sulfate	
	Hostapur SAS 60	20.00%
	Sodium C14-17 Sec. Alkyl Sulfonate	
	Water	29.00%
C	Shellsol D 70	25.00%
	Petroleum Distillates	

**Procedure:**

- I Mix the components of A.
  - II One after another, the components of B are added to I.
  - III Heat II to 70C, then add C.
  - IV Finally homogenize if necessary.
- Formula A II/1029

SOURCE: Hoechst: Guide Formulations for Cosmetics &amp; Toiletries

# **Section IX**

## **Shampoos**

Amino Moisture Balance Shampoo

	%W/W
A. Deionized Water	35.10
Sodium C14-C16 Olefin Sulfonate	35.10
May-Tein CT (TEA-Cocoyl Hydrolyzed Collagen)	10.00
Quat-Pro S (Stearyltrimonium Hydroxy Ethyl Hydrolyzed Collagen)	1.50
Aqua-Tein C (Collagen Amino Acids (and) Acetamide MEA (and) Propylene Glycol)	3.00
Cocoamphocarboxyglycinate	5.00
Monamid CMA (Cocamide MEA)	3.00
Methylparaben	0.20
B. Dowicil 200 (Quaternium-15)	0.20
Ammonium Chloride	2.00
Deionized Water	5.00
Citric Acid	q.s.
Fragrance, color	q.s.

Procedure:

Warm phase A to 65C. Mix until melted and homogeneous. Adjust pH while warm to pH=6.5. Pre-dissolve Ammonium Chloride in water. Add carefully to avoid air entrapment. Cool to 50C. Add fragrance

Properties:

This shampoo is an effective cleanser with excellent foam generating properties. Quat-Pro S and Aqua-Tein C provide the conditioning required for good manageability and an optimum moisture balance throughout the hair. May-Tein CT provides anti-irritancy and mildness. Quat-Pro S, a quaternized, high molecular weight protein coats, seals and protects the hair. The hair is left feeling soft and bodied.

SOURCE: Maybrook Inc.: Formula #HS-115

Shampoo

Clear, low viscosity

Materials/CTFA-Index:

Texapon NA/Ammonium Laureth Sulfate	22.50%
Hoe S 3267/Cocamidopropyl Betaine	22.50
Water	48.00
Belsil ADM 6041 E/Amodimethicone (and) Emulsifier	1.00
Belsil DMC 6031/Dimethicone Copolyol	1.00
Ammonium Chloride	5.00
Preservatives, fragrances	q.s.

Dissolve Hoe S 3267 in water, add the remaining components and adjust the viscosity with the ammonium chloride.

Temperature stability: at 45C over 10 weeks.

SOURCE: Wacker Silicone: Formulation 150 AH

Amino-Soy Revital Shampoo

	%W/W
A. Deionized Water	46.70
Monamate OPA-30 (Disodium Oleamido PEG-2 Sulfosuccinate)	8.00
Monateric ISA-35 (Sodium Isostearamphopropionate)	8.00
Soy-Tein NL (Hydrolyzed Soy Protein)	2.00
Ammonium Lauryl Sulfate	25.00
May-Tein SY (TEA-Cocoyl Hydrolyzed Soy Protein)	10.00
B. Glydant	0.30
Fragrance	q.s.
Citric Acid, 50% Solution	q.s. to pH 6.5

**Procedure:**

Mix and heat phase A to 50C. Mix until homogeneous. Mix and cool to 40C. Add fragrance & preservative. Add citric acid to thicken.

**Properties:**

A foaming vegetable shampoo with excellent foam generation. Mild, yet thorough cleansing. May-Tein SY is a mild, foaming Lipo-protein which is biodegradable. Soy-Tein NL adds conditioning and post-shampoo benefits. These substantive proteins equilibrate the moisture content of the hair so it actually improves with time. Moist hair is less raspy, feels better and is less prone to breakage. An excellent shampoo for permed or treated hair.

SOURCE: Maybrook Inc.: Formulation #HS-202

Shampoo for Permed Hair

	Weight, %
Mackanate OP	20.0
Mackanate CP	12.0
Mackol 70NS	10.0
Mackamine WGO	4.0
Mackalene 716	1.0
Paragon Preservative	q.s.
Citric acid to pH 6.0	
Sodium Chloride qs to 2000 cps	
Water, Dye, Fragrance qs to	100.0

**Procedure:**

1. Add surfactants to water and heat to 40C.
2. Blend until clear and adjust pH with citric acid.
3. Add remaining components and adjust viscosity with sodium chloride.

SOURCE: McIntyre Group Ltd.: Suggested Formulation



**Anti-Dandruff Shampoo**

Therapeutic shampoo containing 2% zinc pyrithione in a thick, rich foaming conditioning shampoo.

<u>Ingredients:</u>	<u>Weight%</u>	<u>Function</u>
<b>Part A:</b>		
Deionized Water	31.1	Diluent
Ammonium Lauryl Sulfate (28%) (1)	34.3	Surfactant
Laureamidopropyl Betaine (32%) (2)	7.5	Surfactant
<b>Part B:</b>		
Carbopol 1382 (3)	0.5	Suspension Stabilizer
Cocamide DEA (4)	3.5	Foam Stabilizer
<b>Part C:</b>		
Deionized Water	16.0	Diluent
Disodium EDTA	0.1	Chelant
DMDM Hydantoin (5)	0.4	Preservative
Guar Hydroxypropyltrimonium Chloride (6)	0.5	Conditioner
Sodium Hydroxide (10%)	2.0	Neutralizing Agent
<b>Part D:</b>		
Zinc Pyrithione (48%) (7)	4.1	Active

- (1) Standapol A (Henkel)
- (2) Mackam LMB-LS (McIntyre Group)
- (3) Carbomer (BFGoodrich)
- (4) Standamid KD (Henkel)
- (5) Glydant (Lonza)
- (6) N-Hance (Aqualon)
- (7) Zinc Omadine (Olin Chemical)

**Preparation Procedure:**

1. Combine Part A ingredients, slowly mix, heat to 40-50C.
2. Separately heat cocamide DEA to 50C, slowly mix in Carbopol forming a paste, add to Part A.
3. Combine Part C ingredients, carefully disperse guar before adding NaOH, add to Part A&B.
4. With slow mixing add zinc pyrithione to shampoo base; mix 20-30 minutes.

**SOURCE:** BF Goodrich Co.; Formula C-0038

**Antidandruff-Shampoo**  
Clear, 15.1% active ingredient

**Recipe:**

A	Octopirox	0.50%
	Piroctone Olamine	
B	Water	10.00%
C	Genapol LRO liquid	35.00%
	Sodium Laureth Sulfate	
	Genapol SBE	5.00%
	Disodium Laureth Sulfosuccinate	
	Perfume	0.30%
D	Allantoin	0.20%
E	Water	40.30%
F	Dyestuff solution	q.s.
	Genagen CAB	6.00%
	Cocamidopropyl Betaine	
	Genapol L-3	1.50%
	Laureth-3	
G	Sodium chloride	1.20%

**Procedure:**

I Mix A and B. II C is added by continuing stirring until the solution is clear. III Dissolve D in warmed E. IV Stir III into II. V One after another the components of F are added to IV. VI If necessary adjust the pH. VII Finally adjust the viscosity with G.

Formula B I/6134

**Antidandruff-Shampoo**

**Recipe:**

A	Octopirox	0.75%
	Pyroctone Olamine	
B	Water	10.00%
C	Genapol LRO liquid	35.00%
	Sodium Laureth Sulfate	
	Genapol SBE	10.00%
	Disodium Laureth Sulfosuccinate	
D	Perfume	0.30%
	Water	34.25%
	Genagen CAB	6.00%
	Cocamidopropyl Betaine	
	Dyestuff solution	q.s.
E	Sodium chloride	1.70%

**Procedure:**

I Mix A and B. II C is added by continuing stirring until the solution is clear. III One after another the components of D are added to II. IV If necessary adjust the pH. V Finally adjust the viscosity with E.

Formula B I/6136

SOURCE: Hoechst: Guide Formulations for Cosmetics & Toiletries

Anti-Dandruff Shampoo

	%W/W
Texapon IES	50.0
Dehyton AB 30	10.0
Bactericide	0.5
1,2-propylene glycol	5.0
Water	34.5
Note: WAS 28%, viscous	
Formula No. T61-16	

Shampoo for Greasy Hair

	%W/W
Texapon MG	40.0
Comperlan F	1.0
Paravital 9B	5.0
Sodium chloride	2.0
Water	52.0
Note: WAS 15.5%, medium viscous	
Formula No. T61-18	

Sulfur Shampoo

	%W/W
Texapon IES	40.0
Bioschwefel-Fluid	3.0
Water	57.0
Note: WAS 20%, viscous	
Formula No. T61-19	

Shampoo, with Azulene, Clear

	%W/W
Texapon ASV	30.0
Texapon SBN	30.0
Azulene	0.1
Sodium chloride	4.0
Water	35.9
Note: WAS 19%, viscous	
Formula No. T61-20	

Herbal Shampoo, Clear

	%W/W
Texapon N25/N40	50.0
Comperlan KD	2.0
Extrapon 5 spec.	2.0
Extrapon birch spec.	1.0
Sodium chloride	2.0
Water	43.0
Note: WAS 16%, medium viscous	
Formula No. T61-21	

SOURCE: Henkel KGaA: Cosmetic Model Formulae

**Anti-Dandruff Shampoo with Ritavena 5**

<b><u>Ingredients:</u></b>	<b><u>%W/W</u></b>
Part A:	
1. Sodium Lauryl Sulfate	51.70
2. Distilled Water	8.80
3. Pationic ISL/85	3.00
4. Rita EGDS	3.00
5. Ritamid C	4.50
6. Propylene Glycol	2.00
Part B:	
7. NaCl (25% Solution)	+ -1.00
8. Patlac LA (44% Solution)	QS
Part C:	
9. Flowers of Sulfur	2.00
Part D:	
10. Ritavena 5	4.00
11. Distilled Water (100C)	20.00

**Compounding Procedure:**

Premix Part D in blender for 2 minutes. Heat part A to 165F. When at temperature stir Part A until homogeneous. Switch to high shear mixing (do not aerate). Add Part C into Part A and shear for 10-12 minutes (until thoroughly dispersed). While still warm, switch again to regular impeller mixer and add Part D. Mix well while cooling in water bath. Adjust pH to 7.5 with Patlac LA if needed. Adjust viscosity with NaCl solution. Formula 113-120A

**Anti-Dandruff Shampoo with Ritavena 5**

<b><u>Ingredients:</u></b>	<b><u>%W/W</u></b>
Part A:	
1. Sodium Lauryl Sulfate	51.70
2. Distilled Water	8.80
3. Pationic ISL/85	3.00
4. Rita EGDS	3.00
5. Ritamid C	4.50
6. Propylene Glycol	2.00
Part B:	
7. NaCl (25% Solution)	+ -1.00
8. Patlac LA (44% Solution)	QS
Part C:	
9. Flowers of Sulfur	2.00
Part D:	
10. Ritavena 5	4.50
11. Distilled Water (100C)	19.50

**Compounding Procedure:**

Heat Part A to 165F. When at temperature, stir until homogeneous, then switch to high shear mixing (do not aerate). Sprinkle Part C into Part A and shear for 10-12 minutes (until thoroughly dispersed). Premix Part D in blender for 1 minute. While still warm, switch A & C to regular impeller mixer and add Part D. Mix well while cooling in water bath. Adjust pH to 7.5 with Patlac LA if needed. Adjust viscosity with NaCl solution.

Formula 113-120B

SOURCE: R.I.T.A. Corp.: Ritavena 5 Suggested Formulations

**Anti-Dandruff Shampoo with Ritavena 5**

<b><u>Ingredients:</u></b>	<b><u>%W/W</u></b>
Part A:	
1. Sodium Lauryl Ether Sulfate	57.69
2. Pationic ISL/85	3.00
3. Rita EGDS	3.00
4. Propylene Glycol	2.00
Part B:	
5. Zinc Omadine	2.00
Part C:	
6. Ritavena 5	4.50
7. Distilled Water (100C)	26.41
Part D:	
8. Patlac LA (44% Solution)	+ -0.40
Part E:	
9. NaCl (25% Solution)	+ -1.00

**Compounding Procedure:**

Heat Part A in water bath to 165F, stir until uniform. Premix Part C in blender for 2 minutes. Place Part A under high shear mixer (do not aerate). Add Part B and shear for approximately 12-15 minutes (until thoroughly dispersed). While still warm, remove from high shear mixer, place under regular impeller mixer and add Part C. Water bath cool to 120F. Add Part D to pH=5.5. Adjust viscosity with Part E if necessary.

Note: 2% Zinc Omadine is not necessary as functionality remains with 1% Zinc Omadine. Acid pH is necessary for proper stability of Omadine.

Formula 113-141C

**Silicone Shampoo with Ritavena 5**

<b><u>Ingredients:</u></b>	<b><u>%W/W</u></b>
Part A:	
1. Pationic 138C	8.00
2. Masil SF 60,000	1.00
3. Ritapeg 150 DS	2.00
4. Rita EGDS	3.00
5. Witconate SXS	2.00
6. Propylparaben	0.05
Part B:	
7. Distilled Water	34.25
8. Bio-Terge AS-40	37.50
9. Methylparaben	0.15
Part C:	
10. Distilled Water (100C)	10.00
11. Ritavena 5	2.00
Part D:	
12. Kathon CG	0.05

**Compounding Procedure:**

Heat Parts A and B to 165F. Combine. Mix until uniform. Premix Part C in blender for 2 minutes. Add Part C to mixture. Cool to 120F. Add Part D.

Formula 114-7

**SOURCE: R.I.T.A. Corp.: RITAVENA 5 Suggested Formulations**

Balance Shampoo

<u>Component:</u>	<u>%</u>
Plantaren 2000	20.0
Texapon ALS	6.5
Antil 141S	3.0
Perfume	q.s.
Water, preservative	up to 100
WAS: 12	
pH-value: 5,5	
Viscosity mPas: 4220	
Hint: Kind and amount of perfume may influence the viscosity of the product.	
Formulation No.: 93/178/9	

Shampoo with Care Additive

<u>Component:</u>	<u>%</u>
Plantaren PS 10	16.0
Lamequat L	2.0
Perfume oil	q.s.
NaCl	2.0
Water, preservative	up to 100
pH-value: 5,5	
WAS: 10	
Viscosity mPas: 14600	
Hint: Kind and amount of perfume may influence the viscosity of the product.	
Formulation No.: 92/184/26	

Shampoo with Plantaren PS 10

<u>Component:</u>	<u>%</u>
Plantaren PS 10	15.0
Dehyton K	10.0
Cetiol HE	2.0
NaCl	0.5
Perfume oil	q.s.
Water, preservative	up to 100
pH-value: 5,5	
WAS: 12	
Viscosity mPas: 3700	
Hint: Kind and amount of perfume may influence the viscosity of the product.	
Formulation No.: 92/184/28	

SOURCE: Henkel KGaA: Model Formulae

Clear Shampoo

	%
Texapon K 14 S 70 spezial	11.0
Dehyton K	7.0
Plantaren 1200	4.0
Arlypon F	0.9
NaCl	3.0
Perfume	q.s.
Water, preservative	up to 100

pH-value: 5,5

WAS: 12

Viscosity mPas: 8000

Hint: Kind and amount of perfume may influence the viscosity of the product.

Formulation No.: 90/139/39

Mild, Clear Care Shampoo

	%
Texapon N70	8.0
Plantaren 1200	4.0
Lamequat L	3.0
NaCl	1.3
Perfume	q.s.
Water, preservative	up to 100

pH-value: 5,5

WAS: 10

Viscosity mPas: 3200

Hint: Kind and amount of perfume may influence the viscosity of the product.

Formulation No.: 90/139/41

Clear Shampoo with Panthenol

	%
Plantaren 1200	10.0
Texapon ALS	17.0
D-Panthenol USP (50%)	1.0
NaCl	2.3
Perfume	q.s.
Water, preservative	up to 100

pH-value: 5,5

WAS: 10

Viscosity mPas: 5000

Hint: Kind and amount of perfume may influence the viscosity of the product.

Formulation No.: 90/139/50

SOURCE: Henkel KGaA: Model Formulae

Clear Shampoo with Protein

<u>Component:</u>	<u>%</u>
Texapon N70	11.0
Dehyton K	7.0
Plantaren 1200	4.0
Nutrilan I-50	2.0
NaCl	1.6
Perfume	q.s.
Water, preservative	up to 100
pH-value: 5,5	
WAS: 12	
Viscosity mPas: 4300	
Hint: Kind and amount of perfume may influence the viscosity of the product.	
Formulation No.: 90/139/38	

Clear Shampoo with Hydrolyzed Keratin

<u>Component:</u>	<u>%</u>
Plantaren 1200	13.0
Texapon ALS	11.0
Nutrilan Keratin W	3.0
NaCl	0.4
Perfume	q.s.
Water, preservative	up to 100
pH-value: 5,5	
WAS: 10	
Viscosity mPas: 11700	
Hint: Kind and amount of perfume may influence the viscosity of the product.	
Formulation No.: 90/139/47	

Mild, Clear Shampoo with Keratin

<u>Component:</u>	<u>%</u>
Texapon K 14 S spez.	29.0
Plantaren 2000	4.0
Nutrilan Keratin W	1.0
Arlypon F	3.0
NaCl	1.0
Perfume	q.s.
Water, preservative	up to 100
Viscosity mPas: 5220	
WAS: 10	
pH-value: 6,5	
Hint: Kind and amount of perfume may influence the viscosity of the product.	
Formulation No.: 92/087/43	

SOURCE: Henkel KGaA: Model Formulae



**Clear & Bright Shampoo Plus Conditioner**  
**(Formula 90-1109)**

This rich lathering shampoo conditions the hair while it cleans and leaves the hair soft and manageable. Unlike many conditioning shampoos, which leave the hair feeling heavy or oily, this formula conditions the hair without heavy buildup.

<u>Step A:</u>	<u>% By Weight</u>
Water	22.20
Jaguar C-162	0.30

Charge water into mixing vessel. With rapid but smooth agitation, slowly disperse Jaguar C-162 in water. With smooth agitation, warm system to 40-45C.

<u>Step B:</u>	
Rhodapon L-22HNC	65.00
Ammonium Xylene Sulfonate (40%)	5.00
Citric Acid (25% Aqueous)	Q.S. to pH 5.5-6.0

With smooth agitation slowly blend Rhodapon L-22HNC and AXS-40 into heated water system. Mix until completely uniform (heat may be needed). Adjust pH system to 5.5-6.0 with Citric Acid (25% Aq.) as needed.

<u>Step C:</u>	
Alkamide LE	1.50
Mirapol 550	0.50
Mirataine BET-0-30	5.00
Citric Acid (25% Aqueous)	Q.S. to pH 5.5-6.0

Combine Alkamide LE, Mirapol 550, and Mirataine BET-0-30. Mix until uniform. This should produce a pourable slurry. Slowly blend the slurry into the main system and mix until uniform. Adjust pH of system to 5.5-6.0 with Citric Acid as needed.

<u>Step D:</u>	
Fragrance	Q.S.
Dye(s)	Q.S.
Preservative	Q.S.

Slowly blend compatible Fragrance, Dye(s), and Preservative into system. Mix until uniform.

<u>Step E:</u>	
Ammonium Chloride	Q.S.
or	
Ammonium Xylene Sulfonate (40%)	Q.S.

If desired, trace concentrations (0.05% increments) of Ammonium Chloride may be added to increase the formulation viscosity. Additions of AXS-40 (0.5% increments) may be used to lower the formulation viscosity.

**Typical Formulation Properties**

Appearance @ 25C:	Clear Liquid
pH (as is):	5.5-6.0
Viscosity @ 25C (No. 4 Spindle @ 20RPM)	4,000-6,000 cps

**CTFA Designation:** Water, Ammonium Lauryl Sulfate, Ammonium Xylene Sulfonate, Lauramide DEA, Oleamidopropyl Betaine, Polyquaternium 7, Hydroxypropyl Guar Hydroxypropyltrimonium Chloride, Citric Acid, Preservative, Dye, Ammonium Chloride.

**SOURCE:** Rhone-Poulenc Surfactants & Specialties: Formula 90-1109

**Conditioning, Anti-Dandruff Shampoo**  
(Formula 91-1105)

	<u>% By Weight</u>
<u>Step A:</u> Jaguar C-17	0.50
Water	35.00
<u>Step B:</u> Rhodigel EZ	0.05
<u>Step C:</u> Citric Acid	Q.S. to pH 5-7
<u>Step D:</u> Rhodapon SB 8208S	45.00
<u>Step E:</u> Alkamide C-212	1.80
Alkamuls EGMS	0.90
<u>Step F:</u> Zinc Omadine 48% Active Dispersion (Olin)	2.00
Water	45.00
<u>Step G:</u> Citric Acid	Q.S. to pH 5.5-6.5
<u>Step H:</u> Fragrance, Dye(s), Preservative	Q.S.
<u>Step I:</u> Mirataine CBC	6-14

Blending Procedure:

- Step A: With rapid but smooth agitation, disperse Jaguar C-17 in water. Heat system to 40-45C with smooth agitation.
- Step B: With vigorous agitation, disperse Rhodigel EZ into heated water base. With vigorous agitation, continue to heat system to 60C.
- Step C: Adjust formulation pH to 5-7 with Citric Acid as needed.
- Step D: With smooth agitation, slowly blend in Rhodapon SB 8208S. With smooth agitation heat system to 70-75C.
- Step E: With smooth agitation, slowly blend Alkamide C-212 and Alkamuls EGMS into heated system. Mix until uniform.
- Step F: Combine water and Zinc Omadine dispersion and mix until uniform. With rapid but smooth agitation, slowly blend into heated shampoo base. Mix until uniform and then cool system to 40-45C with smooth agitation.
- Step G: Adjust formulation pH to 5.5-6.5 with Citric Acid as needed.
- Step H: Add compatible Fragrance, Dye(s), and Preservative.
- Step I: Adjust formulation viscosity to 7,000-11,000 cps (No. 4 Spindle @ 10 RPM-25C) with the incremental addition of Mirataine CBC as needed.

Typical Formulation Properties

Appearance @ 25C: Viscous, Opaque Liquid  
 pH: 5.5-6.5  
 Viscosity @ 25C: 7,000-11,000 cps (No. 4 spindle @ 10 RPM)  
 % Non Volatiles: 20-23  
 Active Ingredient: Zinc Pyrithione

Other Ingredients (CTFA Identification): Water, Sodium Lauryl Sulfate, Cocamidopropyl Betaine, Cocamide MEA, Glycol Stearate, Guar Hydroxypropyltrimonium Chloride, Fragrance, Preservative, Citric Acid, Xanthan Gum, Dye(s).

**SOURCE:** Rhone-Poulenc Surfactants & Specialties: Formula 91-1105

**Conditioning Shampoo**

Thick, stable shampoo having good cleaning and conditioning properties of the hair.

<u>Ingredient:</u>	<u>Weight%</u>	<u>Function</u>
<b>Part A:</b>		
Deionized Water	21.55	Diluent
Ammonium Lauryl Sulfate (28%) (1)	43.00	Surfactant
Ammonium Laureth Sulfate (27%) (2)	11.00	Surfactant
<b>Part B:</b>		
Carbopol 1382 (3)	0.75	Suspension Stabilizer
Cocamide DEA (4)	3.50	Foam Stabilizer
<b>Part C:</b>		
Dimethicone (100,000 cs) (5)	1.00	Lubricant
Olealkonium Chloride (6)	0.50	Conditioner
<b>Part D:</b>		
Deionized Water	16.00	Diluent
Disodium EDTA	0.10	Chelant
DMDM Hydantoin (7)	0.40	Preservative
Guar Hydroxypropyltrimonium Chloride (8)	0.20	Conditioner
NaOH (10%)	2.00	Neutralizing Agent

- (1) Standapol A (Henkel)
- (2) Standapol EA-3 (Henkel)
- (3) Carbomer (BFGoodrich)
- (4) Standamid KD (Henkel)
- (5) 200 Fluid (Dow Corning)
- (6) M-Quat JO 50 (PPG-Mazer)
- (7) Glydant (Lonza)
- (8) N-Hance (Aqualon)

**Preparation Procedure:**

1. Combine Part A ingredients, slowly mix, heat to 50C.
2. Separately heat cocamide DEA to 50C, slowly mix in Carbopol forming a paste, add to Part A with moderate speed, mixing 30 minutes.
3. Separately combine Part C ingredients, heat to 50C, slowly mix to combine with Parts A and B with moderate speed mixing.
4. Separately add guar into first three ingredients of Part D, when dispersed add NaOH, combine with Parts A, B, and C, with slow agitation for 20 minutes.

SOURCE: BF Goodrich Co.: Formula C-0038

Conditioning Shampoo

High-viscosity product with a silky shine. Very mild.

Material/CTFA-Index:

Water	53.50%
Texapon ASV/Sodium Laureth Sulfate (and) Magnesium Laureth Sulfate (and) Sodium Laureth 8-Sulfate (and) Sodium Oleth Sulfate (and) Magnesium Oleth Sulfate	20.00
Dehyton K/Cocamidopropyl Betaine	11.00
Comperlan KD/Cocamide DEA	4.00
Sodium Chloride	1.00
Texapon SG/Sodium Laureth Sulfate (and) Cocamide MEA (and) Glycol Distearate	10.00
Belsil DMC 6031/Dimethicone Copolyol	0.50
Preservatives, fragrances	q.s.

Mix all components in the given order.

Temperature stability: at 45C over 10 weeks.

Formulation 201 AH

Shampoo

Clear, thin gel.

Materials/CTFA-Index:

Hoe S 3267/Cocamidopropyl Betaine	22.50%
Wasser, dest./Water	52.00
Texapon NA/Ammonium Laureth Sulfate	22.50
Belsil DMC 6033/Dimethicone Copolyol Acetate	1.00
Belsil ADM 6041 E/Amoldimethicone (and) Emulsifier	1.00
Ammonium Chloride	1.00
Preservatives, fragrances	q.s.

Dissolve Hoe S 3267 in water, add Texapon NA, Belsil DMC 6033 and Belsil ADM 6041 E, homogenise the mixture and adjust the desired viscosity with the ammonium chloride.

Temperature stability: at 45C over 10 weeks.

Formulation 151 AH

SOURCE: Wacker Silicone: Suggested Formulations

Conditioning Shampoo

<u>Ingredients:</u>	<u>%</u>
Phase A:	
H2O, Deionized	54.995
Celquat H-100	0.10
Standapol ES-2	25.00
Hetaine CLA (Canolamidopropyl Betaine)	5.00
Hetamide RC (Cocamide DEA)	1.50
Hest E.G.D.S. (E.G.D.S)	0.80
SF 96-350	0.75
Merquat 280	0.75
Phase B:	
Kathon CG	0.07
Phase C:	
Citric Acid	0.035
FD&C Blue #1	Q.S.

Specifications:

pH: 5.5-6.0

Viscosity #3/12: 5000 cps

Procedure:

- 1) In a stainless steel kettle add H2O. While mixing sprinkle Celquat H-100 into vortex.
  - 2) Add remainder of Phase A and heat to 75C while mixing until homogeneous.
  - 3) Cool to 40C and add Phase B.
  - 4) Adjust pH with citric acid.
  - 5) Color as desired.
- Formula HS 93-85

Clear Shampoo

<u>Ingredients:</u>	<u>%</u>
H2O, Deionized	56.93
Sodium Laureth-2 Sulfate	25.0
Hetaine CLA	9.5
Decyl Polyglucose	7.5
PEG-7 Glyceryl Cocoate	1.0
Kathon CG	0.07

Specifications:

pH: 6.50

Viscosity #3/12: 5500 cps

Procedure:

In a stainless steel tank equipped with a Lightnin' type mixer, combine all ingredients. Mix until uniform.

Comments:

This mild shampoo is alkanolamide and salt free, while maintaining viscosity.

It is also a cold process formula.

Formula HS 93-90

SOURCE: Heterene, Inc.: Suggested Formulas

**Conditioning Shampoo**  
(Formula 92-1202)

	<u>% by Weight</u>
A. Deionized water	61.20
Jaguar C-17	0.30
Citric Acid	Q.S. to pH 4.0-5.0
B. Rhodacal A-246L	20.0
Mirataine BET C-30	15.0
Alkamide DC-212/S	2.0
Alkamuls EGMS/C	1.0
Sodium Chloride	0.5
Preservative	Q.S.
Fragrance and dye(s)	Q.S.

Blending Procedure:

Dissolve Jaguar C-17 thoroughly in water. Adjust pH to 4-5 with citric acid with agitation. Heat to 65C, then add "B" (except Alkamuls EGMS/C and sodium chloride). Adjust pH of formulation to 5-6 with citric acid, then add Alkamuls EGMS/C and sodium chloride. Continue agitation until uniform and cool to room temperature.

Note: Sodium chloride may be added in trace concentrations (0.05-0.1%) to increase viscosity and to provide a very good pearl.

Tentative Specifications:

Solids: 16.2%  
pH: 5.0-6.0  
Viscosity: 4,500-5,000 cps

**After-Perm Conditioning Shampoo**  
(Formula 92-1211)

	<u>% by Weight</u>
A. Deionized water	60.7
Jaguar HP 8	0.3
Citric Acid	q.s. to pH 4-5
B. Rhodopon ESY	22.0
Mirataine BET C 30	12.0
Alkamide DC-212/S	2.0
Alkamuls EGMS/C	1.0
Ammonium Xylene Sulfonate	2.0
Fragrance, preservative, dye	q.s.

Procedure:

Disperse Jaguar HP 8 thoroughly in water. Adjust pH with citric acid to 4-5. Heat/mix to 75C and add "B" in order given. Continue agitation until uniform. At 45C, adjust pH to 5-6 with citric acid, if necessary.

Typical Formulation Properties:

Appearance @ 25C: Viscous, opaque liquid  
Viscosity @ 25C: 3500 cps  
pH: 5-6  
% Non-Volatiles: 15

SOURCE: Rhone-Poulenc Surfactants & Specialties: Formulas

**Conditioning Shampoo**  
**(Creme of Nature Type)**  
**Formula 92-1212**

	<u>% by Weight</u>
Step A:	
Deionized water	52.2
Jaguar C-13S	0.3
Citric Acid	q.s. to pH 4-5
Step B:	
Rhodapon L22HNC	30.0
Mirataine BET C-30	12.0
Alkamuls EGMS/C	2.0
Hydrolyzed Collagen	2.0
Alkamide DC-212/S	1.0
Sodium Chloride	0.5
Fragrance, dyes, preservative	Q.S.

**Blending Procedure:**

Disperse Jaguar C-13S thoroughly in water and adjust pH to 4-5 with citric acid. Continue agitation and heat to 75C, then add "B" in order listed. Continue agitation to cool to 45C. Adjust pH to 5-6 with citric acid, if necessary.

**Typical Formulation Properties:**

Appearance:	Viscous, opaque liquid
% Nonvolatile:	16.5
pH:	5.0-6.0
Viscosity:	3,800 cps

**CTFA Identification:** Water, Ammonium Lauryl Sulfate, Cocamidopropyl Betaine, Glycol Stearate, Hydrolyzed Collagen, Cocamide DEA, Sodium Chloride.

**Neutralizing Shampoo**  
**(Formula 93-0501)**

<u>Component:</u>	<u>% by Weight</u>
A. Rhodapex ES	18.0
Mirataine COB	10.0
Alkamide DC-212/S	2.0
B. Deionized Water	69.1
Sodium Borate	0.5
Acetic Acid	0.2
Sorbic Acid	0.2
C. Phenolphthalein	Q.S.
FD&C Yellow #6	Q.S.
Methyl Paraben	Q.S.
Fragrance	Q.S.

**Procedure:**

Heat "A" and "B" separately to 75C. With agitation, add "B" to "A" until uniform and cool to 45C. Adjust pH to 4.0-5.5 with acetic acid, if necessary. Add "C", then package.

**SOURCE:** Rhone-Poulenc Surfactants & Specialties: Formulas

**Conditioning-Shampoo**  
**Clear, 17.0% active ingredient**

**Recipe:**

A	Genapol LRO liquid	35.00%
	Sodium Laureth Sulfate	
	Genapol AMG	8.00%
	Magnesium-PEG-3 Cocamide Sulfate	
B	Belsil DMC 6032	0.50%
	Dimethicone Copolyol	
	Merquat 550	5.00%
	Polyquaternium-7	
	Perfume	0.30%
C	Water	33.90%
	Glycerine	5.00%
	Genagen CAB	10.00%
	Cocamidopropyl Betaine	
	Genapol L-3	1.80%
	Laureth-3	
	Dyestuff solution	q.s.
	Preservative	q.s.
D	Sodium chloride	0.50%

**Procedure:**

- I Mix the components of A.
  - II Add the components of B to I, and stir until a clear solution has been obtained.
  - III One after another the components of C are added to II.
  - IV If necessary adjust the pH.
  - V Finally adjust the viscosity with D.
- Formula B I/6139

**Conditioning-Shampoo**  
**Clear, 11.5% active ingredient**

**Recipe:**

A	Genapol LRO liquid	25.00%
	Sodium Laureth Sulfate	
B	Genamin KSL	2.00%
	PEG-5 Stearyl Ammonium Lactate	
C	Genapol AMG	8.00%
	Magnesium-PEG-3 Cocamide Sulfate	
	Perfume	0.30%
	Water	57.20%
	Genagen CAB	6.00%
	Cocamidopropyl Betaine	
	Dyestuff solution	q.s.
	Preservative	q.s.
D	Sodium chloride	1.50%

**Procedure:**

- I Dissolve B in A.
  - II One after another the components of C are added to I.
  - III If necessary adjust the pH.
  - IV Finally adjust the viscosity with D.
- Formula B I/6118

**SOURCE: Hoechst: Guide Formulations for Cosmetics & Toiletries**



**Conditioning-Shampoo**  
 With pearl lustre effect, 18.0% active ingredient

**Recipe:**

A	Coconut fatty acid diethanolamide	2.20%
B	Water	10.00%
C	Genapol LRO liquid	40.00%
	Sodium Laureth Sulfate	
	Hostapon KCG	5.00%
	Sodium Cocoyl Glutamate	
	Genamin KSL	2.00%
	PEG-5 Stearyl Ammonium Lactate	
	Softigen 767	0.40%
	PEG-6 Caprylic/Capric Glycerides	
	Perfume	0.30%
	Belsil DMC 6032	1.00%
	Dimethicone Copolyol	
	Genapol TSM	2.00%
	PEG-3 Distearate (and) Sodium Laureth Sulfate	
D	Polymer JR 400	0.60%
	Polyquaternium-10	
E	Water	27.50%
F	Genagen CAB	7.00%
	Cocamidopropyl Betaine	
	Dyestuff solution	q.s.
	Preservative	q.s.
G	Sodium chloride	2.00%

**Procedure:**

- I Dissolve A in warmed B.
- II One after another the components of C are added to I.
- III Dissolve D in warmed E, then stir into II.
- IV One after another the components of F are added to III.
- V If necessary adjust the pH.
- VI Finally adjust the viscosity with G.

**SOURCE:** Hoechst: Guide Formulations for Cosmetics & Toiletries:  
 Formula B I/6140

Conditioning Shampoo

Creamy, white with a silky shine.

Material/CTFA-Index:

A: Texapon A/Ammonium Lauryl Sulfate	20.00%
Texapon NA/Ammonium Laureth Sulfate	20.00
B: Genapol PMS/Glycol Distearate	3.00
Comperlan 100/Cocamide MEA	3.00
Lanette O/Cetearyl Alcohol	1.00
C: Water	50.00
Carbopol 934/Carbomer 934	1.50
Triethanolamine	2.00
D: Wacker-Belsil ADM 6057 E/Amodimethicone(a.)	
Trideceth-10(a.) Cetrimonium Chloride	3.00
Preservative, fragrances, pigments	q.s.

Mix A and heat to 70C, melt B and then stir into A.  
Mix C stir AB into C at approx. 35C and then add D.

Formulation 985 AH

Conditioning Shampoo

High-viscosity product with a silky shine.

Material/CTFA-Index:

Water	48.00%
Texapon ASV/Sodium Laureth Sulfate (and) Magnesium Laureth Sulfate (and) Sodium Laureth 8-Sulfate (and) Sodium Oleth Sulfate (and) Magnesium Oleth Sulfate	25.00
Dehyton K/Cocamidopropyl Betaine	11.00
Comperlan KD/Cocamide DEA	4.00
Texapon SG/Sodium Laureth Sulfate (and) Cocamide MEA (and) Glycol Distearate	6.00
Wacker-Belsil DM 6600 E/Dimethicone (and) Trideceth-10	5.00
Preservative, fragrances, pigments	q.s.

Mix all the ingredients in this order.

Formulation 661 AH

SOURCE: Wacker Silicone: Suggested Formulations

**Conditioning-Shampoo**  
Clear, 19.0% active ingredient

**Recipe:**

A	Genapol LRO liquid	35.00%
	Sodium Laureth Sulfate	
	Genapol AMG	5.00%
	Magnesium-PEG-3 Cocamide Sulfate	
	Hostapon SCHC	5.00%
	Sodium Cocoyl Hydrolyzed Collagen	
	Hostapon KCG	5.00%
	Sodium Cocoyl Glutamate	
B	Belsil DMC 6032	2.00%
	Dimethicone Copolyol	
	D-Panthenol	1.00%
	Perfume	0.30%
C	Water	34.20%
	Genagen CAB	8.00%
	Cocamidopropyl Betaine	
	Genapol L-3	2.50%
	Laureth-3	
	Dyestuff solution	q.s.
	Preservative	q.s.
D	Sodium chloride	2.00%

**Procedure:**

- I Mix the components of A.  
 II Add the components of B to I, and stir until a clear gel has been obtained.  
 III One after another the components of C are added to II.  
 IV If necessary adjust the pH.  
 V Finally adjust the viscosity with D.  
 Formula B I/6128

**Antidandruff-Shampoo**

With pearl lustre effect, 14.2% active ingredient

**Recipe:**

A	Octopirox	0.50%
	Piroctone Olamine	
B	Water	10.00%
C	Genapol LRO liquid	40.00%
	Sodium Laureth Sulfate	
D	Genapol PGL	4.00%
	Glycol Distearate (and) Cocamide MEA (and)	
	PPG-4 Deceth-4	
	Perfume	0.30%
	Water	34.20%
	Dyestuff solution	q.s.
	Genagen CAB	6.00%
	Cocamidopropyl Betaine	
E	Sodium chloride	1.00%

**Procedure:**

- I Mix A and B. II C is added by continuing stirring until the solution is clear. III One after another the components of D are added to II. IV If necessary adjust the pH. V Finally adjust the viscosity with E.  
 Formula B I/6126

SOURCE: Hoechst: Guide Formulations for Cosmetics & Toiletries

Conditioning Shampoo, Clear

	%W/W
Texapon N25	35.0
Lamepon S	15.0
Comperlan OD	1.0
Lamequat L	4.0
Perfume	0.2
Sodium chloride	0.5
Water	44.3
Note: Medium viscous, WAS 16%	
Formula No. T61-65	

Conditioning Shampoo, Clear

	%W/W
Texapon N25/N40	20.0
Texapon K14 S special	20.0
Dehyquart E	3.5
Sodium chloride	3.5
Water	53.0
Note: Low viscous, WAS 12%	
Formula No. T61-67	

Anti-Dandruff Shampoo, Clear

	%W/W
Texapon N25	25.0
Dehyton K	15.0
Lamepon S	20.0
Lamepon UD	5.0
Lamequat L	1.5
Lamesoft LMG	1.5
Perfume	0.3
Water	31.7
Note: Medium viscous, WAS 19%	
Preparation: Lamesoft LMG is dissolved in Texapon N25 (or in a part of it) and the other substances are added in the order given above.	
Formula No. T61-70	

Anti-Dandruff Shampoo with Sulfur

	%W/W
Texapon N25	40.0
Lamepon S-TR	15.0
Lamepon UD	5.0
Comperlan KD	1.5
Bioschwefel fluid	0.2
Perfume	0.3
Sodium chloride	1.5
Water	36.5
Note: Medium viscous, WAS 19%	
Formula No. T61-72	

SOURCE: Henkel KGaA: Cosmetic Model Formulae

**Cream Shampoo with Protein**

	<u>%W/W</u>
I Texapon CS paste	90.0
Comperlan LP	5.0
Hydagen P	2.0
Water	3.0

Note: WAS 58%, paste

Preparation: The ingredients shown in the formula are mixed together and melted at approx. 75C.

Formula No. T65-08

**Herbal Shampoo in Cream Form**

	<u>%W/W</u>
I Texapon CS paste	35.0
Siebert Stearin L2 SM	10.0
Triethanolamine	4.0
Sodium chloride	3.0
Water	45.0
II Hexaplast Richter	3.0

Note: AS 34%, WAS 20%, paste, pH 6-7

Preparation: The ingredients shown in the formula are mixed together and melted at approx. 75C. Hexaplast Richter is added below 40C.

Formula No. T65-10

**Softening Shampoo in Cream Form with Guar Derivative**

	<u>%W/W</u>
I Texapon N70	20.0
Comperlan 100	3.0
Cutina AGS	3.0
II Water	42.4
Sodium chloride	0.8
III Cosmedia Guar C261	0.8
Water 70-80C	30.0

Note: WAS 17%

Preparation: Phases I and II are heated to approx. 80C and mixed together slowly while stirring continuously. When they have cooled to under 40C, Phase III, which has also been allowed to cool, is added.

Formula No. T65-11

**Cream-Shampoo with Ampholyte**

	<u>%W/W</u>
I Texapon CS paste	35.0
Dehyton G	7.0
Siebert Stearin L2 SM	10.0
II Water	45.0
Sodium chloride	3.0

Note: WAS 36%, pH 6-7

Preparation: Phases I and II are heated to approx. 80C while being slowly mixed together and stirred continuously. When the mixture has cooled to under 40C, the pH is regulated with triethanolamine.

Formula No. T65-13

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Cristal Clear Shampoo

Component:	%
Texapon NSO	25.0
Plantaren 2000 UP	5.0
Dehyton K	8.0
Lamequat L	3.0
Arlypon F	1.5
Eumulgin L	1.0
Perfume oil 200 192 B	0.5
Water, preservatives	up to 100
Viscosity in mPas, 20C/after storage: 2400	
Hint: The choice of perfume influences the colour stability.	
Formulation No.: 93/109/9p	

Cristal Clear Shampoo

Component:	%
Texapon NSO	20.0
Plantaren 2000 UP	5.0
Dehyton K	8.0
Arlypon F	3.0
Eumulgin L	1.0
Perfume oil 200 288	0.5
Water, preservatives	up to 100
Viscosity in mPas, 20C/after storage: 12,000	
Hint: The choice of perfume influences the colour stability.	
Formulation No.: 93/109/6p	

Cristal Clear Shampoo

Component:	%
Texapon NSO	20.0
Plantaren 2000 UP	5.0
Dehyton K	8.0
Arlypon F	2.5
Eumulgin L	1.0
Perfume oil 200 288	0.5
Water, preservatives	up to 100
Viscosity in mPas, 20C/after storage: 2400	
Hint: The choice of perfume influences the colour stability.	
Formulation No.: 93/109/5P	

Cristal Clear Shampoo

Component:	%
Texapon NSO	25.0
Plantaren 2000 UP	5.0
Dehyton K	10.0
Arlypon F	3.5
Aethoxal B	1.0
Perfume oil 200 288	0.5
Viscosity in mPas, 20C/after storage: 12400	
Hint: The choice of perfume influences the colour stability.	
Formulation No.: 93/109/3P	

SOURCE: Henkel KGaA: Model Formulae

**Everyday Mild Conditioning Shampoo**  
(Formula 92-0213)

	<u>% By Weight</u>
Miranol C2M Conc. NP	20.0
Rhodapon ES	20.3
Mirataine BET-0-30	4.9
Alkamuls EGMS/C	2.0
Jaguar C-14 COS	0.2
Propylene Glycol	1.0
Citric Acid	Q.S. to pH 6-7
D.I. Water	51.6
Fragrance, Dye(s), Preservative	Q.S.

**Blending Procedure:****Step A:**

Charge water into mixing vessel. Heat to 50C. With smooth agitation, slowly sift in Jaguar C-14 COS. Mix until uniform and add Citric Acid Q.S. to pH 4.0-4.5. When uniform, blend in Propylene Glycol, Miranol C2M Conc. N.P. and Rhodapon ES. Slowly blend in BET-0-30. Shampoo will thicken with betaine addition. Mix until uniform and adjust pH to 6.0-7.0 with Citric Acid.

**Step B:**

Heat system to 70-75C and add Alkamuls EGMS/C. Mix until completely uniform and then allow system to cool to 40-45C and add Fragrance, Dye(s) and Preservative.

**Typical Formulation Properties**

Appearance @ 25C:	Pearlescent Liquid
pH (as is):	6.0-7.0
Viscosity @ 25C:	4,000-6,000 cps
% Non-Volatiles	19-21

CTFA Identification: Water, Disodium Cocoamphodiacetate, Sodium Laureth Sulfate, Sodium Chloride, Glycol Stearate, Oleamidopropyl Betaine, Guar Hydroxypropyltrimonium Chloride, Citric Acid.

**Economy Shampoo**  
(Formula 92-0417)

	<u>% By Weight</u>
Rhodapex NA61	6.5
Alkamide DC 212/S	0.4
Cellosize QP 30,000H (Union Carbide)	1.0
Fragrance, Dye, Preservative	q.s.
Water	92.1

**Blending Procedure:** Charge water into mixing vessel and warm to 45-50C. With rapid, but smooth agitation, sift slowly the Cellosize QP 30,000H into heated water so as to avoid clumping. Mix until system is completely clear and uniform. Slowly blend Rhodapex NA61, followed by Alkamide DC212/S. Cool to 40-45C with moderate agitation. At 40-45C, add fragrance, dye and preservative.

**Typical Formulation Properties**

Appearance @ 25C:	Clear liquid
Viscosity @ 25C (cps):	Brookfield RVT #4 spindle @ 20 rpm: 1200-1700
Approximate % Solids:	5.3

SOURCE: Rhone-Poulenc Surfactants & Specialties: Formulas

Family Shampoo

	<u>%W/W</u>
A. Celquat L 200 (Polyquaternium-4)	0.10
Deionized Water	57.25
Methylparaben	0.15
B. Quat-Pro S (Stearyltrimonium Hydroxyethyl Hydrolyzed Collagen)	1.00
C. TEA-Lauryl Sulfate	30.00
Supro-Tein V (TEA-Cocoyl Hydrolyzed Collagen (and) Sorbitol)	6.00
Cocamide MEA	5.00
D. Fragrance	0.30
Dowicil 200 (Quaternium-15)	0.20

**Procedure:**

1. Heat Phase A to 70C. Mix until homogeneous.
2. Add Phase B. Mix to incorporate.
3. Add Phase C. Mix to incorporate.
4. Add Phase D below 40C. Mix to incorporate.

**Properties:**

This one shampoo can satisfy the entire family's needs. Hair is left clean, refreshed, and soft to the touch.

Formula #HS-107

Collagen Gel Shampoo

	<u>%W/W</u>
A. Bioterge AS-40 (Sodium C16-18 Olefin Sulfonate)	44.00
Monamid 150-LW (Lauramide DEA)	3.40
Deionized Water	44.60
B. Miranol C2M Concentrate (Disodium Cocoamphodiacetate)	6.00
Collagen Hydrolyzate Cosmetic 50 (Hydrolyzed Collagen)	2.00
C. Fragrance, preservative, color	q.s.
Citric Acid to pH 6.5	q.s.
NaCl	q.s.*
*q.s. to desired viscosity	

**Procedure:**

1. Heat Phase A to 60C. Mix carefully until clear.
2. Add Phase B. Mix to incorporate.
3. Add Phase C when product is below 40C. Mix to incorporate.

**Properties:**

Mild, creamy lather, rinses readily from hair. A clear gel protein shampoo for developing body and imparting a clean, natural look.

Formula #HS-105

SOURCE: Maybrook Inc.: Suggested Formulations



**Frequent-Use Antidandruff Shampoo Plus Conditioner**

Vanseal CS, Cocoyl Sarcosine, enhances the quality and quantity of the lather produced by the primary surfactant, ammonium lauryl sulfate. Both are mild surfactants that make this shampoo safe for daily use. The formula is thickened with a synergistic combination of Veegum HS, Magnesium Aluminum Silicate and Hydroxypropyl Guar. The primary hair conditioning agent is Polyquaternium-10 and Zinc Pyrithione is the anti-dandruff agent.

<u>Ingredient:</u>	<u>% by Weight*</u>
A: Veegum HS, Magnesium Aluminum Silicate	1.00
Deionized Water	47.35
Citric Acid	0.05
Hydroxypropyl Guar**	1.00
B: Deionized Water	15.00
Vanseal CS, Cocoyl Sarcosine**	3.00
Ammonium Lauryl Sulfate	30.00
Polyquaternium-10***	0.50
C: Sodium Hydroxide (25% Soln.) to pH 6.5	q.s.
Zinc Pyrithione***	2.10
Preservative, Dye, Fragrance	q.s.
*As Received Basis	
**Jaguar HP-60	
***Polymer LR-400	
****Zinc Omadine, 48% Dispersion	

**Mixing Procedure:**

Mix the Polyquaternium-10 in the Part B water until a clear solution is achieved. Add Ammonium Lauryl Sulfate and Vanseal CS and continue mixing until uniform and clear. Deaerate if necessary. Heat Part A water to 50C and add Veegum HS while stirring with a propeller mixer at 1800 rpm. Continue mixing for 1 hour. Remove from heat and allow the batch to cool. Add Citric Acid and then the Hydroxypropyl Guar. Continue mixing for 15 minutes. Slow the mixer to 500 rpm and add the part B mixture. Continue mixing and cooling until smooth and uniform. Add Part C ingredients in the order shown, mixing until uniform. Package in opaque bottles.

**Formula Properties:**

Viscosity: 7000+-1000 cps (Brookfield Model LVT at 60 RPM)  
pH: 6.5+-0.2

SOURCE: R.T. Vanderbilt Co., Inc.: Formula No. 456

Gentle Shampoo

A clear, moderately viscous shampoo that provides rich, lubricious lather and softness to the hair. This pH-balanced formula is extremely gentle and provides effective cleansing without harsh stripping.

	<u>% by Weight</u>
Part A:	
Deionized Water	45.55
Methylparaben	0.20
Lauroamphoglycinate (and) Trideceth Sulfate (Miranol MHT)	30.00
TEA-Cocoyl Glutamate (Amisoft CT-12)	20.00
Sodium Cocoyl Glutamate (Amisoft CS-11)	1.00
PEG-150 Distearate	1.50
Sodium PCA (Ajidew N-50)	1.00

Part B:	
Methylchloroisothiazolinone (and) Methylisothiazolinone (Kathon CG)	0.05
Fragrance (Noville #84504)	0.20
Citric Acid	0.50

Compounding Procedure:

Heat part A to 65C until completely homogeneous. Cool to 40C. Add part B.

Color: Light straw-clear

pH: 5.65

Viscosity: 3,750 cps (#4 spindle @ 10 rpm)

Conditioning Shampoo

Milky cloudy, high viscosity.

Material/CTFA-Index

A: Water	76.50%
Tylose H 4000 P/Hydroxyethylcellulose	0.80
B: Comperlan KD/Cocamide DEA	3.00
Texapon NA/Ammonium Laureth Sulfate	16.70
Belsil ADM 6057 E/Amodimethicone (and) Tallowtrimonium Chloride (and) Nonoxynol-10	3.00
Preservatives, fragrances, pigments	q.s.

Homogenise A well, mix Belsil ADM 6057 E.

SOURCE: Wacker Silicone: Formulation 551 AH

**Hair Repair Shampoo**  
**(Shampoo for Damaged Hair)**

<b><u>Ingredients:</u></b>	<b><u>%w/w</u></b>
Tetrasodium EDTA	0.1
Water	60.5
Ammonium Lauryl Sulfate	10.0
Ammonium Laureth Sulfate (2M E.O.)	20.0
PEG-18 Glyceryl Oleate/Cocoate (Antil 171)	1.5
Cocamidopropyl Betaine (Tego Betaine L-7)	5.0
Dimethicone Copolyol (Abil B 8851)	0.5
Propylene Glycol	1.0
Dimethicone/Sodium Poly PG-Propyl Dimethicone	
Thiosulfate Copolymer (Abil S 201)	1.0
Quaternium-80 (Abil Quat 3272)	0.4
Color	Q.S.
Fragrance	Q.S.
Preservatives	Q.S.
Citric Acid	to pH 7.0
Ammonium Chloride	Q.S.

**Procedure:**

1. Dissolve the Tetrasodium EDTA in the water.
2. Add ingredients in order, mixing between additions. Avoid air entrapment.
3. Slowly mix in the PEG-18 Glyceryl Glycol Dioleococoate.
4. Adjust viscosity with the 25% solution of Ammonium Chloride.

Note: For manufacturing ease, a 25% solution of Ammonium Chloride can be made.

Note: SLS/SLES and Sodium Chloride may be substituted for the ALS/ALES and Ammonium Chloride.

**Ethnic Hair Care**  
**Cream Conditioning Shampoo**

<b><u>Ingredients:</u></b>	<b><u>%w/w</u></b>
Water	37.6
Sodium Lauryl Sulfate	45.0
Glyceryl Stearate (Tegin)	3.0
Octyl Palmitate (Tegosoft OP)	0.5
Isopropyl Palmitate (Tegosoft P)	0.5
Cocamidopropyl Betaine (Tego Betaine F)	7.0
Quaternium-80 (Abil Quat 3272)	0.4
Dimethicone Copolyol (Abil B 88183)	0.5
Jobba Oil	0.5
Citric Acid (25% Solution)	to pH 6.8
Cocamidopropyl Betaine (and) Glyceryl Laurate	
(Antil HS 60)	5.0
Fragrance	Q.S.
Sodium Chloride (25% solution)	Q.S.

**Procedure:**

1. Heat the water to 60-65C. Add the Sodium Lauryl Sulfate, Tegin, and the Tegosoftware. Mix until fully dispersed.
2. Begin cooling. Cool to 45C.
3. Add the remaining ingredients in order.
4. Adjust viscosity.

SOURCE: Goldschmidt Chemical Corp.: Suggested Formulations

Hair Shampoo

With silky lustre effect, 16.5% active ingredient

Recipe:

A	Hostapon SCID	2.00%
	Sodium Cocoyl Isethionate	
B	Water	53.00%
C	Genapol LRO liquid	30.00%
	Sodium Laureth Sulfate	
	Genapol SBE	5.00%
	Disodium Laureth Sulfosuccinate	
	Perfume	0.30%
	Genapol L-3	2.00%
	Laureth-3	
	Genagen CAB	5.00%
	Cocamidopropyl Betaine	
	Genapol TSM	2.00%
	PEG-3 Distearate (and) Sodium Laureth Sulfate	
	Dyestuff solution	q.s.
	Preservative	q.s.
D	Sodium chloride	0.70%

Procedure:

- I Dissolve A by warming stirring in B (60C).
  - II Cool down and add the components of C at 35C under stirring.
  - III If necessary adjust the pH.
  - IV Finally adjust the viscosity with D.
- Formula B I/2130

Hair Shampoo

With pearl lustre effect, 19.6% active ingredient

Recipe:

A	Hostapon SCI	5.00%
	Sodium Cocoyl Isethionate	
B	Water	40.30%
C	Genapol L-3	2.00%
	Laureth-3	
	Genapol AMG	6.00%
	Magnesium-PEG-3 Cocamide Sulfate	
	Genapol LRO liquid	40.00%
	Sodium Laureth Sulfate	
	Genapol PGL	5.00%
	Glycol Distearate (and) Cocamide MEA (and)	
	PPG-4 Deceth-10	
	Perfume	0.30%
	Dyestuff solution	q.s.
	Preservative	q.s.
D	Sodium chloride	1.40%

Procedure:

- I Dissolve A in warmed B.
  - II One after another the components of C are added to I.
  - III If necessary adjust the pH.
  - IV Finally adjust the viscosity with D.
- Formula B I/2128

SOURCE: Hoechst: Guide Formulations for Cosmetics &amp; Toiletries

Hair Shampoo  
Clear, 14.4% active ingredient

Recipe:

A	Genapol LRO liquid	30.00%
	Sodium Laureth Sulfate	
B	Genapol SBE	6.00%
	Disodium Laureth Sulfosuccinate	
	Perfume	0.30%
	Water	55.00%
	Genapol L-3	2.00%
	Laureth-3	
	Genagen CAB	5.00%
	Cocamidopropyl Betaine	
	Dyestuff solution	q.s.
	Preservative	q.s.
C	Sodium chloride	1.70%

Procedure:

I One after another the components of B are added to A.

II If necessary adjust the pH.

III Finally adjust the viscosity with C.

Formula B I/1128

Hair Shampoo  
Clear, 16.9% active ingredient

Recipe:

A	Genapol LRO liquid	40.00%
	Sodium Laureth Sulfate	
B	Perfume	0.30%
C	Water	52.50%
D	Natriumhydroxid	0.20%
E	Hostapon LEC	4.00%
	Laureth-3 Carboxylic Acid	
	Genapol L-3	2.00%
	Laureth-3	
	Dyestuff solution	q.s.
	Preservative	q.s.
F	Sodium chloride	1.00%

Procedure:

I Mix A and B.

II Dissolve D in C.

III Stir II into I.

IV One after another the components of E are added to III.

V If necessary adjust the pH.

VI Finally adjust the viscosity with F.

Formula B I/1124

SOURCE: Hoechst: Guide Formulations for Cosmetics & Toiletries

Hair Shampoo

With pearl lustre effect, 12.2% active ingredient

Recipe:

A	Genapol LRO liquid	35.00%
	Sodium Laureth Sulfate	
	Water	53.20%
	Genapol TS powder	1.50%
	PEG-3 Distearate	
	Sodium chloride	1.50%
	Genagen CAB	8.00%
	Cocamidopropyl Betaine	
B	Dyestuff solution	q.s.
	Preservative	q.s.
	Perfume	0.30%
C	Sodium chloride	0.50%

Procedure:

- I Melt the components of A at 70C.
  - II Stir until cool.
  - III At 40C add the components of B to II.
  - IV If necessary adjust the pH.
  - V Finally adjust the viscosity with C.
- Formula B I/2124

Hair Shampoo

With pearl lustre effect, 16.0% active ingredient

Recipe:

A	Genapol LRO liquid	40.00%
	Sodium Laureth Sulfate	
B	Genapol AMG	8.00%
	Magnesium-PEG-3 Cocamide Sulfate	
	Genapol PGM conc.	5.00%
	Sodium Laureth Sulfate (and) Glycol Distearate	
	(and) Cocamide MEA	
	Perfume	0.30%
	Water	38.70%
	Dyestuff solution	q.s.
	Preservative	q.s.
	Genagen CAB	6.00%
	Cocamidopropyl Betaine	
C	Sodium chloride	2.00%

Procedure:

- I One after another the components of B are added to A.
  - II If necessary adjust the pH.
  - III Finally adjust the viscosity with C.
- Formula B I/2129

SOURCE: Hoechst: Guide Formulations for Cosmetics &amp; Toiletries

Hair Shampoo  
Clear, 18.4% active ingredient

Recipe:

A	Genapol LRO liquid	35.00%
	Sodium Laureth Sulfate	
B	Hostapon LEC	5.30%
	Laureth-3 Carboxylic Acid	
	NaOH (50% in water)	0.70%
	Perfume	0.30%
	Genapol L-3	1.00%
	Laureth-3	
	Water	48.45%
	D-Panthenol	0.50%
	Genagen CAB	8.00%
	Cocamidopropyl Betaine	
	Dyestuff solution	q.s.
	Preservative	q.s.
C	Sodium chloride	0.75%

Procedure:

- I One after another the components of B are added to A.  
 II If necessary adjust the pH.  
 III Finally adjust the viscosity with C.  
 Formula B I/1126

Hair Shampoo  
For greasy hair, clear, 19.4% active ingredient

Recipe:

A	Genapol LRO liquid	50.00%
	Sodium Laureth Sulfate	
B	Hostapur SAS 60	6.00%
	Sodium C14-17 Sec. Alkyl Sulfonate	
	Extrapon 5 special	3.00%
	Perfume	0.30%
	Water	32.70%
	Genagen CAB	6.00%
	Cocamidopropyl Betaine	
	Dyestuff solution	q.s.
	Preservative	q.s.
C	Sodium chloride	2.00%

Procedure:

- I One after another the components of B are added to A.  
 II If necessary adjust the pH.  
 III Finally adjust the viscosity with C.  
 Formula B I/6123

SOURCE: Hoechst: Guide Formulations for Cosmetics & Toiletries

Hair Shampoo

For every day, clear, 15.2% active ingredient

Recipe:

A	Genapol LRO liquid	35.00%
	Sodium Laureth Sulfate	
B	Genapol AMG	8.00%
	Magnesium-PEG-3 Cocamide Sulfate	
	Perfume	0.30%
	Gelita Sol C	1.00%
	Hydrolyzed Collagen	
	Water	43.20%
	Dyestuff solution	q.s.
	Preservative	q.s.
	Genagen CAB	10.00%
	Cocamidopropyl Betaine	
	Genapol L-3	1.00%
	Laureth-3	
C	Sodium chloride	1.50%

Procedure:

- I One after another the components of B are added to A.  
 II If necessary adjust the pH.  
 III Finally adjust the viscosity with C.  
 Formula B I/1112

Hair Shampoo

For every day, clear, 15.3% active ingredient

Recipe:

A	Genapol LRO liquid	30.00%
	Sodium Laureth Sulfate	
B	Genapol AMG	8.00%
	Magnesium-PEG-3 Cocamide Sulfate	
	Hostapon KCG	5.00%
	Sodium Cocoyl Glutamate	
	Perfume	0.30%
	Water	46.70%
	Dyestuff solution	q.s.
	Preservative	q.s.
	Genagen CAB	6.00%
	Cocamidopropyl Betaine	
	Genapol L-3	2.00%
	Laureth-3	
C	Sodium chloride	2.00%

Procedure:

- I One after another the components of B are added to A.  
 II If necessary adjust the pH.  
 III Finally adjust the viscosity with C.  
 Formula B I/6119

SOURCE: Hoechst: Guide Formulations for Cosmetics &amp; Toiletries



Hair Shampoo

Mild, for every day, clear, 12.8% active ingredient

Recipe:

A	Genapol LRO liquid	35.00%
	Sodium Laureth Sulfate	
B	Genapol PGC	2.00%
	Glycol Distearate (and) Laureth-4 (and) Cocamido- propyl Betaine	
	Perfume	0.30%
	Tocopherol acetate	0.05%
	Extrapon sage	0.50%
	Extrapon blam mint	0.50%
	Honey	0.50%
	Extrapon camomile special	0.50%
	Belsil DMC 6032	0.30%
	Dimethicone Copolyol	
	Dyestuff solution	q.s.
	Preservative	q.s.
C	Cosmedia Guar C 261	0.20%
	Guar Hydroxypropyltrimonium Chloride	
D	Water	53.35%
E	Genagen CAB	10.00%
	Cocamidopropyl Betaine	
	Sodium chloride	1.80%

Procedure:

- I One after another the components of B are added to A.
- II Dissolve C in D.
- III Stir II into I.
- IV If necessary adjust the pH.
- V Finally adjust the viscosity with E.

Hair Shampoo

Clear, 15.8% active ingredient

Recipe:

A	Hostapon SCID	2.00%
	Sodium Cocoyl Isethionate	
B	Water	54.30%
C	Genapol LRO liquid	30.00%
	Sodium Laureth Sulfate	
	Genapol SBE	5.00%
	Disodium Laureth Sulfosuccinate	
	Perfume	0.30%
	Genapol L-3	2.00%
	Laureth-3	
	Genagen CAB	5.00%
	Cocamidopropyl Betaine	
	Dyestuff solution	q.s.
	Preservative	q.s.
D	Sodium chloride	1.40%

Procedure:

- I Dissolve A by warming stirring in B (60C).
- II Cool down and add the components of C at 35C under stirring.
- III If necessary adjust the pH.
- IV Finally adjust the viscosity with D.

SOURCE: Hoechst: Formulas B I/6141 and B I/1127

Herbal Shampoo, Clear

	<u>%W/W</u>
Texapon ASV	50.0
Hexaplan Richter	3.0
Water	47.0
Note: WAS 14%, low viscous	
Formula No. T61-23	

Dead Nettle Extract Shampoo, Clear

	<u>%W/W</u>
Texapon N25/N40	30.0
Comperlan KD	6.0
Cetiol HE	5.0
Dead nettle extract (Extractum Lamii Albi fluid)	0.5
Water	59.0
Note: WAS 14%, viscous	
Formula No. T61-25	

Fruit Shampoo (Apple) pH-Balanced

	<u>%W/W</u>
Texapon TH	30.0
Dehyton AB30	10.0
Comperlan KD	2.0
Paravital 9B	2.0
Apple aroma	0.2
Perfume oil apple	0.5
Color solution 2% Pine needle green 5/067114	0.1
Water	55.2
Note: WAS 20.5%, low viscous, desired pH: 5-6	
Formula No. T61-27	

Shampoo, Clear, Liquid, Very Acidic

	<u>%W/W</u>
Texapon A	40.0
Comperlan KD	3.0
Sodium chloride	2.0
Sodium sulfate	2.0
Citric acid	0.2
Water	52.8
Note: WAS 17%, medium viscous, desired pH: 4.0-4.5	
Formula No. T61-29	

Shampoo with Ampholyte

	<u>%W/W</u>
Dehyton AB 30	50.0
Water	50.0
Note: WAS 15%, low viscous	
Formula No. T61-30	

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Herbal Shampoo, Pearly

	%W/W
Texapon N40	48.0
Euperlan PK 810	5.0
Comperlan KD	3.0
Hexaplan Richter	3.0
Sodium chloride	1.0
Water	40.0
Note: WAS 18%	
Formula No. T64-62	

Mild, Pearly Gloss Shampoo

	%W/W
Texapon SBN	30.0
Euperlan PK 810	12.0
Comperlan F	4.0
Soluvit-Richter	2.0
Sodium chloride	0.5
Water	51.5
Note: WAS 17%	
Formula No. T64-64	

Shampoo for Dry Hair, With Protein

	%W/W
I Hydagen P	2.0
Dehyton AB 30	3.0
Water	29.0
II Texapon N25	40.0
Euperlan PK 810	5.0
Cetiol HE	2.0
Sodium chloride	2.5
Water	16.5

Note: WAS 14%

Preparation: Hydagen P is homogeneously mixed in Dehyton AB 30 and water (approx. 60C) and allowed to cool. The remaining ingredients are then added.

Formula No. T64-65

Protein Shampoo, Very Skin Compatible

	%W/W
Texapon K14S special	25.0
Texapon EVR	25.0
Dehyton G	5.0
Hydagen P	0.5
Water	44.5
Note: WAS 17%	
Formula No. T64-66	

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Keratin Neutralizing Shampoo

	<u>%W/W</u>
Stepanol AM (Ammonium Lauryl Sulfate)	40.0
Witcamide 6519 (Lauramide DEA)	4.0
Amphosol CA (Cocamidopropyl Betaine)	15.0
Mayphos 5C10 (PPG-5-Ceteth-10 Phosphate)	5.0
Cationic Collagen Polypeptides	3.0
Kera-Quat WKP (Cocodimonium Hydroxypropyl Hydrolyzed Keratin)	1.0
Deionized Water	32.0
Fragrance, Preservatives	q.s.
Citric Acid	q.s. to pH=4

Procedure:

Mix all ingredients together except the Citric Acid. When homogeneous, add the citric acid slowly and with gentle agitation to pH=4.

Properties:

A high foaming, mild, neutralizing shampoo. Restores body and shine to damaged hair. Two cationic proteins condition, protect and re-vitalize the hair. Cationic Collagen Polypeptide, a substantive high molecular weight protein, is very stable at low pH's and is particularly effective at sealing and protecting the hair. Keri-Quat WKP, a substantive quaternized keratin, adds back essential amino acids lost during processing and improves shine and combability.

SOURCE: Maybrook Inc.: Formulation #HS-301

Wheat Germ Conditioning Shampoo

	<u>Weight, %</u>
Mackol 70NS	12.0
Mackanate OP	20.0
Mackanate WGD	8.0
Mackam WGB	5.0
Citric Acid to pH 5.5	
Sodium Chloride qs to viscosity=2000 cps	
Paragon Preservative	q.s.
Water, Dye, Fragrance qs to	100.0

Procedure:

1. Add surfactants to water and heat to 60C.
2. Blend until clear.
3. Adjust pH to 5.5.
4. Add remaining components and adjust viscosity with sodium chloride.

SOURCE: McIntyre Group Ltd.: Suggested Formulation

Liquid Shampoo

Slightly yellow, clear, low viscosity.

Materials/CTFA-Index:

Belsil DMC 6031/Dimethicone Copolyol	5.00%
Water	60.00
Genapol CRT 40/DEA Lauryl Sulphate	35.00
Preservatives, fragrances	q.s.

Dissolve Belsil DMC 6031 in water, mix in Genapol CRT 40.

Temperature stability: at 45C over 10 weeks.

Formulation 222 AH

Shampoo

Clear, liquid.

Material/CTFA-Index:

Belsil DMC 6035/Methicone Copolyol Acetate	2.00%
Water	56.00
Genapol LRO/Sodium Laureth Sulfate	35.00
Comperlan KD/Cocamide DEA	3.00
Sodium Chloride	2.00
Preservatives, fragrances	q.s.

Dissolve Belsil DMC 6035 in water, mix in Genapol LRO. Add Comperlan KD, regulate the viscosity with NaCl.

Temperature stability: at 45C over 10 weeks.

Formulation 284 AH

Shampoo

Clear, high-viscosity. Shampoo with good conditioning effect.

Material/CTFA-Index:

Hoe S 3267/Cocamidopropyl Betaine	22.50%
Water	50.00
Belsil ADM 6042 E/Amodimethicone and Emulsifier	4.00
Texapon NA/Ammonium Laureth Sulfate	22.50
Ammonium Chloride	1.00
Preservatives, fragrances	q.s.

Dissolve HOE S 3267 in water, mix in the amodimethicone and emulsifier. Add the ammonium laureth sulfate and adjust to the desired viscosity with the ammonium chloride.

Formulation 541 AH

SOURCE: Wacker Silicone: Suggested Formulations

Mild, Clear Shampoo

Component:	%
Plantaren PS 10	15.0
Lamepon S	15.0
Gluadin Almond	1.0
NaCl	2.0
Perfume oil	q.s.
Water, preservative	up to 100
pH-value: 6,5	
WAS: 15	
Viscosity mPas: 10000	
Hint: Kind and amount of perfume may influence the viscosity of the product.	
Formulation No.: 92/184/2	

Pearlescent Shampoo with Protein

Component:	%
Plantaren PS 10	17.0
Nutrilan I-50	2.0
Glycerin 86%	1.0
Euperlan PK 900	3.0
Perfume oil	q.s.
NaCl	2.2
Water, preservative	up to 100
pH value: 5,5	
WAS: 10	
Viscosity mPas: 1500	
Hint: Kind and amount of perfume may influence the viscosity of the product.	
Formulation No.: 92/184/40	

Pearlescent Shampoo with Protein

	%
Plantaren 1200	6.0
Texapon N 70	11.0
Nutrilan I-50	2.0
Euperlan PK 3000-AM	1.0
NaCl	3.0
Perfume	q.s.
Water, preservative	up to 100
pH-value: 5,5	
WAS: 11%	
Viscosity mPas: 4500	
Hint: Kind and amount of perfume may influence the viscosity of the product.	
Formulation No.: 90/139/44	

SOURCE: Henkel KGaA: Model Formulae

**Mild Conditioning Shampoo**

<b><u>Ingredients:</u></b>	<b><u>%w/w</u></b>
Tetrasodium EDTA	0.1
Water	45.0
Ammonium Laureth Sulfate (30%)	18.0
Ammonium Lauryl Sulfate (30%)	25.0
Cocamidopropyl Betaine (Tego Betaine L-7)	4.0
Quaternium-80 (Abil Quat 3272)	0.3
Dimethicone Copolyol (Abil B 8852)	0.3
Dimethicone Copolyol (Abil B 88183)	0.3
Citric Acid	to pH 6.5
Fragrance	Q.S.
Color	Q.S.
Preservative	Q.S.
Cocamidopropyl Betaine (and) Glyceryl Laurate (Antil HS 60)	4.0
Glycol Distearate (and) Steareth-4 (Tego Pearl N 100)	3.0
Ammonium Chloride (25% solution) As needed to adjust viscosity	

**Procedure:**

1. Dissolve the Tetrasodium EDTA in the water.
2. Add ingredients in order, mixing between additions. Avoid air entrapment.
3. Slowly mix in the Antil HS 60. Mix until dispersed.
4. Add the Tego Pearl N 100.
5. Adjust viscosity with the 25% solution of Ammonium Chloride

**Conditioning Shampoo for Treated Hair**

<b><u>Ingredients:</u></b>	<b><u>%w/w</u></b>
Tetrasodium EDTA	0.1
Water	41.5
Ammonium Laureth Sulfate (30%)	20.0
Ammonium Lauryl Sulfate (30%)	25.0
Cocamidopropyl Betaine (Tego Betaine L-7)	7.0
Quaternium-80 (Abil Quat 3272)	0.3
Dimethicone Copolyol (Abil B 8851)	0.3
Dimethicone Copolyol (Abil B 88183)	0.3
Dimethicone Propyl PG-Betaine (Abil B 9950)	1.0
Citric Acid	to pH 6.5
Fragrance	Q.S.
Color	Q.S.
Preservative	Q.S.
PEG-18 Glyceryl Oleate/Cocoate (Antil 171)	1.5
Glycol Distearate (and) Steareth-4 (Tego Pearl N 100)	3.0
Ammonium Chloride (25% solution) As needed to adjust viscosity	

**Procedure:**

1. Dissolve the Tetrasodium EDTA in the water.
2. Add ingredients in order, mixing between additions. Avoid air entrapment.
3. Slowly mix in the PEG-18 Glyceryl Oleate/Cocoate. Mix until dispersed.
4. Add the pearling mixture.
5. Adjust viscosity with the 25% solution of Ammonium Chloride.

**SOURCE:** Goldschmidt Chemical Corp.; Suggested Formulations

Milk Powder Shampoo

	%W/W
Texapon SG	50.0
Comperlan KD	3.0
Milk powder	2.0
Water	45.0
Note: WAS 14%, viscous	
Formula No. T64-31	

Shampoo, with Collagen, Pearly

	%W/W
Texapon IES	50.0
Cutina AGS	4.0
Collagen CLR	3.0
Milk powder	3.0
Water	40.0
Note: AS 34%, WAS 30%, high viscous	
Formula No. T64-33	

Sulfur Shampoo, Pearly

	%W/W
Texapon EVR	60.0
Aerosil 200	3.0
Sulfur, precipitated	3.0
Water	34.0
Note: WAS 21%, high viscous	
Formula No. T64-34	

Sulfur Shampoo, Pearly

	%W/W
Texapon SG	20.0
Texapon MLS	20.0
Comperlan KD	4.0
Bioschwefel-Fluid	3.0
Water	53.0
Note: WAS 15%, viscous	
Formula No. T64-35	

Pearly Gloss Shampoo with Protein

	%W/W
I Hydagen P	5.0
Texapon EVR	15.0
II Texapon EVR	15.0
Water	64.5
Sodium chloride	0.5
Note: WAS 11%, viscous	
Preparation: Phase I is homogeneously mixed at 50-60C and cooled again before the remaining ingredients are added one after another.	
Formula No. T64-36	

SOURCE: Henkel KGaA: Cosmetic Model Formulae



Non-Silicone Conditioning Shampoo

	Wt%
Pationic 138C	8.00
PPG Masil SF 60,000	1.00
Ritapeg 150 DS	2.00
Rita EGDS	3.00
Witconate SXS	2.00
Distilled Water	46.45
Bioterge AS-40	37.50
Kathon CG	0.05

pH: 6.4

Viscosity: 24,500 cps

Foam (Minutes):	Foam	H2O
0.0	400	75
1.0	400	100
3.0	400	100

Wet Combing: slightly difficult

Dry Combing: easy, except where knots are

Stabilities:

Freeze/Thaw: no change after 3 cycles

40F: separation after 2 weeks

110F: no change after 6 weeks

Centrifuge Results: separates after 30 min. @ 5000 rpm

Description of System: with silicone/no Ritavena 5

Formula 114-2

Non-Silicone Conditioning Shampoo

	Wt%
Pationic 122A	11.00
PPG Masil SF 60,000	1.00
Ritapeg 150 DS	2.00
Rita EGDS	3.00
Distilled Water	45.45
Bioterge AS-40	37.50
Kathon CG	0.05

pH: 5.7

Viscosity: 12,000 cps

Foam (Minutes):	Foam	H2O
0.0	310	75
1.0	310	100
3.0	310	100

Wet Combing: slightly difficult

Dry Combing: easy, except where knots are

Freeze/Thaw: no change after 3 cycles

40F: no change after 6 weeks

110F: no change after 6 weeks

Centrifuge Results: separates after 20 min. @ 5000 rpm

Description of System: with silicone/no Ritavena 5

Formula 114-4

SOURCE: R.I.T.A. Corp.: Ritavena 5 Suggested Formulations

Non-Silicone Conditioning Shampoo

	Wt%
Pationic 122A	11.00
Ritapeg 150 DS	2.00
Rita EGDS	3.00
Propylparaben	0.05
Distilled Water	44.10
Bioterge AS-40	37.50
Methylparaben	0.15
Ritavena 5	2.00
Kathon CG	0.20

pH: 5.7

Viscosity: 12,500 cps

Foam (Minutes):	Foam	H2O
0.0	340	75
1.0	340	100
3.0	340	100

Wet Combing: slightly difficult

Dry Combing: easy, except where knots are

Stabilities:

Freeze/Thaw: no change after 3 cycles

40F: no change after 6 weeks

110F: separation after 24 hours

Centrifuge Results: separates after 10 min. @ 5000 rpm

Description of System: without silicone/with Ritavena 5

Formula 114-42

Non-Silicone Conditioning Shampoo

	Wt%
Pationic 138C	8.00
Ritapeg 150 DS	2.00
Rita EGDS	3.00
Witconate SXS	2.00
Propylparaben	0.05
Distilled Water	45.10
Bioterge AS-40	37.50
Methylparaben	0.15
Ritavena 5	2.00
Kathon CG	0.20

pH: 6.7

Viscosity: 35,000 cps

Foam (Minutes):	Foam	H2O
0.0	370	75
1.0	360	100
3.0	360	100

Wet Combing: very difficult

Dry combing: very easy

Stabilities:

Freeze/Thaw: no change after 3 cycles

40F: no change after 6 weeks

110F: no change after 6 weeks

Centrifuge Results: not run

Description of System: no silicone/with Ritavena 5

Formula 114-43

SOURCE: R.I.T.A. Corp.: RITAVENA 5 Suggested Formulations

Oil Shampoo in Clear Form

	<u>%W/W</u>
Texapon N25/N40	50.0
Cetiol HE	10.0
Sodium chloride	3.0
Water	37.0
Note: WAS 14%, viscous	
Formula No. T66-01	

Oil Shampoo in Clear Form

	<u>%W/W</u>
Texapon N25/N40	50.0
Aethoxal B	20.0
Comperlan KD	3.0
Water	27.0
Note: WAS 17%, low viscous	
Formula No. T66-03	

Mink Oil Shampoo, Clear

	<u>%W/W</u>
Texapon MG	50.0
Cetiol HE	10.0
Mink oil	0.5
Water	39.5
Note: WAS 14%, low viscous	
Formula No. T66-05	

Oil Shampoo, Pearly

	<u>%W/W</u>
Texapon EVR	50.0
Cetiol HE	10.0
Water	40.0
Note: WAS 18%, viscous	
Formula No. T67-02	

Oil Shampoo, Pearly

	<u>%W/W</u>
Texapon SG	40.0
Texapon IES	15.0
Sodium chloride	2.0
Water	43.0
Note: WAS 17%, viscous	
Formula No. T67-04	

Oil Shampoo with Egg, Pearly

	<u>%W/W</u>
Texapon EVR	50.0
Cetiol HE	5.0
Egg yolk, liquid, techn.	0.5
Water	44.5
Note: WAS 18%, medium viscous	
Formula No. T67-06	

SOURCE: Henkel KGaA: Cosmetic Model Formulae

**Paste Shampoo**  
(Formula 9-0204)

	<u>% By Weight</u>
Rhodapon SB 8208S	50.0
Alkamide DS 280/S	3.0
Alkamuls EGMS	2.5
Stearic Acid TP	7.5
Sodium Hydroxide (50% Aq.)	2.1
Cheelox 100 (Dow)	0.1
Fragrance, Dye(s), Preservative	Q.S.
Water	34.8

Blending Procedure: Combine Sodium Hydroxide solution, Cheelox 100, and water and heat to 65-70C. With smooth agitation slowly blend Stearic Acid TP into system. Mix until uniform. Slowly blend Rhodapon SB 8208S into system. With smooth agitation, heat system to 70-75C. With smooth agitation, slowly blend in Alkamide DS 280/S and Alkamuls EGMS. Mix until uniform and then cool to 40-45C with smooth agitation. Add compatible Fragrance, Dye(s), and Preservative.

Typical Formulation Properties:

Appearance @ 25C\*: Firm, Opaque/Pearlescent Paste  
% Non Volatiles: 27.5-30.5

CTFA Identification: Water, Sodium Lauryl Sulfate, Stearic Acid, Stearamide DEA, Glycol Stearate, Sodium Hydroxide, Fragrance, Preservative, Tetrasodium EDTA, Dye(s).

\*Note: Final formulation consistency will be reached after standing 7-10 days.

**Self Adjusting Shampoo**  
(Formula 82-0206M)

	<u>% By Weight</u>
Rhodapon LT-6	40.0
Alkamide DL-207/S	2.2
Mirataine TM	3.0
Methocel E4M Premium (Dow)	0.7
Cheelox 100 (Dow)	0.2
Citric Acid	Q.S. to pH 6-7
Fragrance, Dye, Preservative	Q.S.
Sodium Chloride	0.5-1.0
Water	53.2

Blending Procedure: Charge water into mixing vessel and warm to 35-40C. With vigorous agitation, slowly sift Methocel E4M Premium into heated water. Mix until completely dispersed. With smooth agitation, continue heating to 50-55C and blend in Rhodapon LT-6, Alkamide DL-207/S, and Mirataine TM. Mix until completely uniform. With smooth agitation, blend in Cheelox 100 and then cool to 35-40C. Adjust the formulation pH to 6-7 with Citric Acid as needed and add compatible Fragrance, Dye(s), and Preservative. Adjust the formulation viscosity to 3,000-5,000 cps with the judicious addition of Sodium Chloride as needed.

Typical Formulation Properties

Appearance @ 25C: Clear Liquid  
pH: 6-7  
Viscosity @ 25C: 3,000-5,000 cps  
% Non Volatiles: 20-22

SOURCE: Rhone-Poulenc Surfactants & Specialties: Formulas

**Pearled Acid Balanced Geropon T-77 Shampoo**  
**(Formula 91-1114)**

	<u>% By Weight</u>
Rhodapon L-22 HNC	53.6
Geropon T-77	3.0
Alkamuls EGMS/C	1.0
Fragrance, Dye(s), Preservative	Q.S.
Ammonium Chloride	0.0-0.5
Water	Q.S.

**Blending Procedure:**

Charge tank with water and Rhodapon L-22 HNC, start heating and mixing. Add Geropon T-77 and Alkamuls EGMS/C and heat (65-70C) and mix until clear (Alkamuls EGMS/C melted). Cool. Add fragrance, dye and preservative at 35C. Thicken product, if desired, with ammonium chloride. Adjust pH, if desired, with citric acid.

**Typical Formulation Properties**

Appearance @ 25C:	Pearled Liquid
Viscosity @ 25C:	2,000-4,000 cps
pH:	6-7
% Non Volatile:	19-21

**CTFA Identification:**

Water, Ammonium Lauryl Sulfate, Sodium Methyl Oleoyl Taurate, Glycol Stearate, Ammonium Chloride, Fragrance, Preservative and Dye.

**Clear Geropon T-77 Shampoo**  
**Formula 92-0301**

	<u>% By Weight</u>
Rhodapon LSB	50.0
Geropon T-77	2.0
Fragrance, dye, preservative	Q.S.
Sodium Chloride	1.5-2.0
Water	Q.S.

**Blending Procedure:**

Charge water and Rhodapon LSB into mixing tank. Add Geropon T-77, mix and heat until clear. (Heating will speed dissolution, but product can be prepared at ambient temperature.) Cool to 35C and add fragrance, dye and preservative. Add sodium chloride to thicken.

**Typical Formulation Properties**

Appearance at 25C:	Clear liquid
pH @ 25C:	7.2-7.8
Viscosity @ 25C:	2,000-4,000 cps
% Nonvolatile:	18-20

**CTFA Identification:**

Water, Sodium Lauryl Sulfate, Sodium Methyl Oleoyl Taurate, Sodium Chloride, Fragrance, Preservative, Dye.

**SOURCE:** Rhone-Poulenc Surfactants & Specialties: Formulas

Pearlescent Shampoo with Hydrolyzed Almond Protein

<u>Component:</u>	<u>%</u>
Plantaren 1200	8.0
Dehyton K	27.0
Gluadin Almond	2.0
Keltrol T	1.0
Perfume	q.s.
Water, preservative	up to 100
pH-value: 5,5	
WAS: 12	
Viscosity mPas: 6500	
Hint: Kind and amount of perfume may influence the viscosity of the product.	
Formulation No.: 90/139/52	

Mild, Pearlescent Shampoo with Protein

<u>Component:</u>	<u>%</u>
Texapon K 14 S spez.	27.0
Plantaren 2000	5.0
Nutrilan I-50	2.0
Euperlan PK 3000-AM	3.0
Arlypon F	3.0
NaCl	0.5
Perfume	q.s.
Water, preservative	up to 100
Viscosity mPas: 4000	
WAS: 10	
pH-value: 6,5	
Hint: Kind and amount of perfume may influence the viscosity of the product.	
Formulation No.: 92/087/57	

Pearlescent Shampoo

<u>Component:</u>	<u>%</u>
Texapon ALS	23.0
Plantaren 2000	4.0
Dehyton K	7.0
Lamesoft 156	5.0
Monomuls 90-L 12	1.0
NaCl	0.2
Perfume	q.s.
Water, preservative	up to 100
pH-value: 5,5	
WAS: 11%	
Viscosity mPas: 14900	
Hint: Kind and amount of perfume may influence the viscosity of the product.	
Formulation No.: 92/087/78	

SOURCE: Henkel KGaA: Model Formulae

**Pearlized Mink Shampoo**

Pearlescent formulations are the easiest way to introduce "heavy duty" hair conditioners such as unsaturated Emulan Oil of Mink into shampoos. This formula is particularly rich, containing Soya Sterol as well. The Glycol Stearate provides a pearlescence that can be dramatically enhanced by adding color.

	<u>Wt. %</u>	<u>CTFA</u>
Water	45.8	
Generol 122E5	1.0	PEG5 soya sterol
Cerasynt IP	1.5	Glycol stearate SE
Emulan, Light Fraction	1.5	Mink Oil
Standapol A	30.0	Ammonium Lauryl Sulfate
Standapol EA-2	15.0	Ammonium Laureth Sulfate
Lauramide DEA	5.0	
Tetrasodium EDTA	0.2	
Perfume, Preservative	q.s.	

**Procedure:**

Heat water to 55C, add to it the soya sterol, mink oil, and glycol stearate. Stir until they melt and disperse. Then add remaining ingredients (at RT) in the sequence shown.

**SOURCE:** Emulan, Inc.: Suggested Formulation

**Low Irritation Shampoo****Ingredients:**

	<u>%</u>
H2O, Deionized	55.68
Hetaine CLA (Canolamidopropyl Betaine)	9.50
Standapol ES-2	22.50
Hetsorb L-80 (PEG-80 Sorbitan Laurate)	4.75
Plantaren 2000	7.50
Kathon CG	0.07

**Specifications**

pH: 6.5

Viscosity #3/12: 5000 cps

**Procedure:**

In a stainless steel kettle combine all ingredients while mixing until uniform.

**SOURCE:** Heterene, Inc.: Formula HS 93-84

**Pearly Gloss Fruit Shampoo (Apple) pH-Balanced**

	<u>%W/W</u>
I Texapon N70	15.0
Comperlan KD	1.0
Euperlan PK771	5.0
II Sodium chloride	2.4
Water	7.6
III Apple aroma	0.2
Perfume oil apple	0.3
Uranin AP color solution 2%	3.0
Pine needle green 5/067114 color solution 2%	1.0
Water	64.5

Note: WAS 14%, viscous, desired pH 5-6

Preparation: Phase I is pre-mixed. The sodium chloride which has been pre-dissolved in a small quantity of water is then added. While continuously stirring, the water is gradually incorporated and then the remaining ingredients are added.  
Formula No. T64-45

**Acidic Shampoo, Pearly**

	<u>%W/W</u>
Texapon A	40.00
Comperlan KD	3.00
Euperlan PK 771	3.00
Sodium chloride	4.00
Citric acid	0.15
Water	49.85

Note: WAS 18%, viscous, desired pH 4-5

Formula No. T64-47

**Anti-Dandruff Shampoo, Pearly**

	<u>%W/W</u>
I Texapon N40	45.0
Comperlan KD	2.5
Euperlan PK 776	3.0
II Omadine MDS	1.0
Water	2.0
III Sodium chloride	2.0
Water	44.5

Note: WAS 16%, viscous, desired pH 6-7, light-protected packaging

Preparation: Omadine MDS is mixed to a paste with water and dissolved in the pre-mixed phase I while stirring. Then the remaining ingredients are added.

Formula No. T64-48

SOURCE: Henkel KGaA: Cosmetic Model Formulae



Pearly Gloss Shampoo with Protein, Slightly Acidic

	%W/W
I Hydagen P	2.0
Texapon MLS	2.0
Water 70C	20.0
II Texapon EVR	30.0
Texapon MLS	8.0
Citric acid 10% solution	1.3
Water	35.7
Sodium chloride	1.0

Note: WAS 14%, slightly acidic, viscous

Preparation: Phase I is homogeneously mixed at 60-70C and cooled again before the remaining ingredients are added one after another.

Formula No. T64-37

Shampoo with Azulene, Pearly

	%W/W
Texapon SG	40.0
Texapon MLS	20.0
Comperlan KD	4.0
Azulene	0.1
Water	35.9

Note: WAS 20%, medium viscous

Formula No. T64-38

Pearly Gloss Shampoo, Softening

	%W/W
Texapon EVR	40.0
Texapon IES	10.0
Polyquart H81	5.0
Water	45.0

Note: WAS 20%, AS 23%, viscous

Formula No. T64-40

Special Shampoo for Dry Hair

	%W/W
Texapon N25/N40	10.0
Texapon SG	20.0
Comperlan KD	3.0
Comperlan KM	5.0
Solulan 98	1.0
Vitamin F, water-soluble CLR	0.5
Water	60.5

Note: WAS 13%, viscous

Formula No. T64-41

SOURCE: Henkel KGaA: Cosmetic Model Formulae

**Professional Formula**  
**Conditioning Shampoo**

<b><u>Ingredients:</u></b>	<b><u>%w/w</u></b>
Tetrasodium EDTA	0.1
Water	45.6
Ammonium Laureth Sulfate (30%)	35.0
Ammonium Lauryl Sulfate (30%)	10.0
Cocamidopropyl Betaine (Tego Betaine L-7)	7.0
Quaternium-80 (Abil Quat 3272)	0.3
Dimethicone Copolyol (Abil B 8851)	0.3
Dimethicone Copolyol (Abil B 88183)	0.3
Cetyl Dimethicone Copolyol (Abil EM-90)	0.4
Citric Acid	to pH 6.5
Fragrance	Q.S.
Color	Q.S.
Preservative	Q.S.
PEG-18 Glyceryl Oleate/Cocoate (Antil 171)	1.0
Ammonium Chloride (25% solution) As needed to adjust viscosity	

**Procedure:**

1. Dissolve the Tetrasodium EDTA in the water.
2. Add ingredients in order, mixing between additions. Avoid air entrapment.
3. Slowly mix in the PEG-18 Glyceryl Oleate/Cocoate.
4. Adjust viscosity with the 25% solution of Ammonium Chloride.

**SOURCE:** Goldschmidt Chemical Corp.: Suggested Formula

**Tear Free 2:1 Shampoo**

	<b><u>Weight, %</u></b>
Mackam 2C	27.0
Mackol 70NS	15.0
Liposorb P-20	4.0
Mackernium 007	2.5
Mackalene 426	2.0
Mackester EGDS	1.6
Paragon preservative	q.s.
Citric Acid	qs to pH 6.5-7.0
Water, Dye, Fragrance qs to	100.0

**Procedure:**

1. Add Mackernium 007 to water and blend until completely dispersed.
2. Add Mackam 2C, Liposorb P-20 and blend until clear.
3. Add Mackalene 426 and heat to 70C.
4. When the Mackalene 426 is completely dispersed, slowly add Mackol 70NS.
5. Blend until product is homogeneous.
6. Add Mackester EGDS and blend until completely dispersed.
7. Cool to 50C and adjust pH to 6.5-7.0 with citric acid.
8. Add Paragon preservative, dye and fragrance.
9. Cool and fill.

**SOURCE:** McIntyre Group Ltd.: Suggested Formulation

Re-Nu Shampoo for Thinning Hair

	<u>%W/W</u>
A. Deionized Water	49.70
Monamid 150-LW (Laureamide DEA)	4.00
Stepanol WAT (TEA Lauryl Sulfate)	15.00
B. Sipon ES-2 (Sodium Laureth Sulfate)	25.00
Aqua-Tein C (Collagen Amino Acids and Acetamide MEA and Propylene Glycol)	2.00
Amphosol CA (Cocamidopropyl Betaine)	4.00
Disodium EDTA	0.30
C. Fragrance, Preservative	q.s.
Citric Acid, to pH 5.5	q.s.

**Procedure:**

1. Mix and heat Phase A until dissolved.

2. Add Phase B to Phase A with mixing.

3. Mix and cool to 50C. Add Phase C.

\*\*Total surfactant solids can be reduced if desired, and Sodium Chloride added to maintain viscosity.

**Properties:**

A rich, mild, viscous shampoo with a specially formulated blend of gentle cleansing agents which clean thinning hair gently, but effectively while adding body and manageability. Cleans without damaging delicate or thinning hair. Aqua-Tein C is a moisture-binding complex of amino acids and Acetamide MEA which maintain the moisture content of the hair. Moist hair has better tensile strength and appears to have an increased volume and fullness. Aqua-Tein C is also an effective anti-irritant and adds to the gentleness of the formula.

SOURCE: Maybrook Inc.: Formula #HS-203

Neutralizer Shampoo

	<u>Weight, %</u>
Mackanate OM	30.0
Mackol 70NS	10.0
Mackamine CAO	6.0
Mackamine WGO	2.0
Paragon Preservative	q.s.
Water, Dye, Fragrance qs to	100.0

**Procedure:**

1. Add surfactants to water and heat to 50C.

2. Blend until clear.

3. Adjust pH to 5.0 with citric acid.

4. Add dye, preservative, fragrance and cool.

SOURCE: McIntyre Group Ltd.: Suggested Formulation

Shampoo

<u>A</u>	Deionized Water	56.18%
	Phoenate SLES-70 (Sodium Laureth Sulfate)	23.00
	Phoenamid LD (Lauramide DEA)	3.50
	Phoenateric CAB (Cocamidopropyl Betaine)	2.00
	Pecosil SSP (Hydrolyzed Soy Protein/ DCP Copolymer)	2.00
	Citric Acid (10% Aq.)	2.54
<u>B</u>	Glycerin	4.00
	Methylparaben	0.30
	Propylparaben	0.10
<u>C</u>	Blue #1 (0.005% Aq.)	0.05
	Yellow #5 (1.0% Aq.)	0.03
<u>D</u>	Deionized Water	5.00
	Sodium Chloride	0.70
	Potassium Sorbate	0.10
	Panthenol	0.50

Procedure:

Add Phoenate SLES-70 to phase A water with adequate agitation. When the solution is clear, add the remaining phase A items in order. Combine phase B items and heat and agitate to solubilize the parabens. When the parabens are in solution, add phase B to phase A with adequate agitation. Add phase C to AB with sweep agitation. Combine phase D items under propeller agitation. When a clear solution is obtained, add phase D to ABC under sweep agitation. Sweep ABCD until uniform.  
Formula 14-62-B

Conditioning Shampoo

<u>A</u>	Deionized Water	57.80%
	Sodium Laureth Sulfate (Phoenate SLES-70)	20.00
	Cocamidopropyl Betaine	1.60
	Cocamidopropyl dimethylamine Dimethicone Copolyol	2.00
	Silicone Quaternium-9 (Pecosil CAP-1240)	
	Decyl Polyglucose	8.00
	Lauramide DEA (Phoenamid LD)	2.00
	PEG-3 Distearate (Phoenate 3DSA)	2.40
	Sodium Chloride	0.80
	PEG-120 Methyl Glucose Dioleate	2.40
	Dimethicone Copolyol Phosphate (Pecosil PS-100)	2.00
<u>B</u>	Propylene Glycol (and) Diazolidinyl Urea (and)	1.00
	Methylparaben (and) Propylparaben	
	Color	q.s.
	Fragrance	q.s.
	10% Aqueous Citric Acid Solution	adjust to pH 5.0-6.0

Procedure:

Combine Phase A items, agitate and heat to 70C. When Phase A is uniform, begin cooling under slow sweep agitation to 45C. Add Phase B under continued slow sweep agitation. When AB is uniform, adjust pH to 5.0-6.0

SOURCE: Phoenix Chemical Co., Inc.: Suggested Formulations

Shampoo, Aerosol-Packed

	<u>%W/W</u>
Texapon N25/N40	50.0
Comperlan KD	3.0
Water	47.0
Note: WAS 17%	
Filling: 92 parts shampoo	
8 parts propellant 12/114 (40:60)	
Formula No. T71-01	

Shampoo Mousse

	<u>%W/W</u>
Texapon N40	40.0
Texapon MLS	20.0
Dehyton K	5.0
Water	35.0
Note: WAS 19%	
Filling: 92 parts shampoo	
8 parts propellant, Frigen 12	
Formula No. T71-02	

Shampoo in Aerosol Form

	<u>%W/W</u>
Texapon K14S special	50.0
Comperlan LS	3.0
Water	47.0
Note: WAS 17%	
Filling: 92 parts shampoo	
8 parts propellant, Frigen 12	
Formula No. T71-03	

Baby Shampoo in Aerosol Form

	<u>%W/W</u>
Texapon ASV	50.0
Dehyton G	5.0
Water	45.0
Note: WAS 16%	
Filling: 92 parts shampoo	
8 parts propellant, Frigen 12	
Formula No. T71-04	

Shampoo in Powder Form, Surfactant-Free

	<u>%W/W</u>
Dehydazol A400P	5.0
Wheat starch	39.0
Magnesium carbonate	12.5
Talc	12.5
Borax	5.0
Sodium chloride	25.0
Dry perfume	1.0
Note: no WAS, powder	
Formula No. T81-01	

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Shampoo, Clear, Liquid

	<u>%W/W</u>
Texapon N25/N40	40.0
Sodium chloride	4.0
Water	56.0
Note: WAS 11%, medium viscous	
Formula No. T61-01	

Shampoo, Clear, Liquid

	<u>%W/W</u>
I Sodium chloride	4.5
Water	6.5
II Texapon N70	14.0
III Water	75.0

Note: WAS 10%, medium viscous

Preparation: The sodium chloride must be dissolved in the smallest possible amount of water in order to obtain a saturated saline solution. The solution is then stirred into the undiluted Texapon N70. The rest of the water is then gradually added. Finally, the preservative is added.

Formula No. T61-03

Shampoo, Clear, Liquid

	<u>%W/W</u>
Texapon MLS	50.0
Comperlan F	3.5
Water	46.5

Note: WAS 20%, medium viscous

Formula No. T61-05

Shampoo, Clear, Liquid

	<u>%W/W</u>
Texapon IES	40.0
Sodium chloride	4.0
Water	56.0

Note: WAS 20%, viscous

Formula No. T61-06

Shampoo, Clear, Liquid

	<u>%W/W</u>
Texapon NA	50.0
Comperlan KD	3.0
Sodium chloride	0.5
Water	46.5

Note: WAS 15%, high viscous

Formula No. T61-07

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Shampoo, Clear, Liquid

	<u>%W/W</u>
Texapon NT	40.0
Comperlan LS	3.0
Sodium chloride	1.0
Water	56.0
Note: WAS 17%, medium viscous	
Formula No. T61-08	

Shampoo, with Hair-Care Effect

	<u>%W/W</u>
Texapon N25/N40	40.0
Dehyton AB 30	5.0
Polyquart H81	5.0
Sodium chloride	1.5
Water	48.5
Note: AS 15%, WAS 13%, medium viscous	
Formula No. T61-10	

Shampoo for Daily Use

	<u>%W/W</u>
Texapon N25/N40	25.0
Comperlan KD	2.0
Polyquart H81	3.0
Sodium chloride	3.0
Water	67.0
Note: AS 11%, WAS 9%, viscous	
Formula No. T61-12	

Shampoo for Daily Use

	<u>%W/W</u>
Texapon K14S spec.	30.0
Comperlan LS	2.0
Sodium chloride	3.0
Water	65.0
Note: WAS 11%, viscous	
Formula No. T61-14	

Anti-dandruff Shampoo

	<u>%W/W</u>
I Texapon N25/N40	45.0
Comperlan KD	2.5
Water	10.0
II Omadine MDS	1.0
Water	2.0
III Sodium chloride	2.0
Water	37.5

Note: WAS 15%, pH 6-7, light-protected packaging

Preparation: Texapon N25 and Comperlan KD are pre-mixed. Part of the water is then added. Omadine MDS is mixed with a small quantity of water to a paste, then stirred into above mixture. The remaining ingredients are then added.

Formula No. T61-15

SOURCE: Henkel KGaA: Cosmetic Model Formulas

Shampoo in Cream Form

Texapon CS paste	%W/W
Comperlan KM	95.0
Note: WAS 57%, paste	5.0
Formula No. T65-01	

Shampoo in Cream Form

I Texapon LS highly conc. needles	%W/W
Siebert Stearin L2 SM	15.0
Comperlan 100	10.0
Dehydol 100 DEO	2.0
Triethanolamine	1.0
Sodium chloride	5.0
Water	2.0
	65.0

Note: WAS 30%, paste

Preparation: Phase I is stirred at approx. 80C until a homogeneous mixture is obtained. It is then cooled while stirring continuously.

Formula No. L65-03

Shampoo in Cream Form

I Texapon Z highly conc. needles	%W/W
Siebert Stearin L2 SM	15.0
Comperlan 100	10.0
Dehydol 100 DEO	2.0
Triethanolamine	0.5
Sodium chloride	5.0
Water	2.0
	65.5

Note: WAS 30%, paste

Preparation: Phase I is stirred at approx. 80C until a homogeneous mixture is obtained. It is then cooled while stirring continuously.

Formula No. T65-04

Cream Shampoo with Egg

Texapon CS paste	%W/W
Comperlan KM	93.5
Egg yolk, liquid, techn.	5.0
Water	0.5
Note: WAS 69%, paste	1.0
Formula No. T65-07	

SOURCE: Henkel KGaA: Cosmetic Model Formulae



**Shampoo Plus Conditioner****(Formula 90-0601)**

This one step shampoo and conditioner demonstrates rich lathering properties while it conditions the hair. Comprised of two protein substantive conditioning agents, this unique formula detangles snarled hair and significantly reduces comb drag.

**Step A:** **% By Weight**

Water	26.65
Jaguar C-14S	0.30
25% Citric Acid Solution	Q.S. to pH 4.0-4.5

Heat water to 50C. With rapid but smooth agitation, slowly disperse Jaguar C-14S in water. Adjust pH to 4.0-4.5 with Citric Acid solution as needed. With pH adjustment, the system will thicken.

**Step B:**

Rhodapex ESY	30.00
Ammonium Xylene Sulfonate (40% Aq.)	2.00
25% Citric Acid Solution	Q.S. to pH 5.7-6.3

Slowly blend Rhodapex ESY and AXS-40 into heated water system. Mix until completely uniform. Adjust formulation to pH 5.7-6.3 with Citric Acid solution as needed. With smooth agitation, continue to heat system to 70-75C.

**Step C:**

Varisoft TC-90 (Sherex)	0.50
Cetyl Alcohol NF	0.40
Stearyl Alcohol	0.40
Alkamuls EGDS	2.00

In a separate mixing vessel, combine Step C ingredients. Heat Step C ingredients (do not scorch) until clear and molten. With rapid but smooth agitation, slowly blend molten Step C phase into 70-75C water phase. Mix until completely uniform.

**Step D:**

Alkamide C-212	1.70
Rhodapon L-22HNC	36.00
25% Citric Acid Solution	Q.S. to pH 5.7-6.3

Slowly blend Alkamide C-212 into heated system and mix until completely uniform. Slowly blend Rhodapon L-22HNC into system. Once uniform, adjust formulation pH to 5.7-6.3 with Citric Acid as needed. With smooth agitation, cool system to 40-45C.

**Step E:**

Kathon CG (Rohm and Haas)	0.05
Fragrance and Dye	Q.S.

Slowly blend Kathon CG and compatible Fragrance and Dye into system. Mix until uniform. Sodium Chloride may be added in trace concentrations (0.05-0.10%) to increase viscosity if needed. Ammonium Xylene Sulfonate may be added to decrease viscosity if needed.

**Typical Formulation Properties**

Appearance @ 25C:	Opaque/Pearlescent Liquid
pH:	5.7-6.3
Viscosity @ 25C (No. 4 Spindle @ 10 RPM):	3,000-5,000 cps

**SOURCE:** Rhone Poulenc Surfactants & Specialties: Formula 90-0601

Shampoo with Ampholyte

	%W/W
Dehyton AB 30	30.0
Eumulgin O 5	15.0
Water	55.0
Note: WAS 21%, viscous	
Formula No. T61-31	

Shampoo with Ampholyte

	%W/W
Texapon N25/N40	30.0
Dehyton K	5.0
Comperlan KD	2.0
Sodium chloride	2.0
Water	61.0
Note: WAS 12%, high viscous	
Formula No. T61-33	

Protein-Shampoo

	%W/W
Texapon MLS	35.0
Comperlan OD	3.0
Hydagen P	1.0
Sodium chloride	0.3
Water	60.7
Note: WAS 14%	
Formula No. T61-36	

Shampoo for Structurally Damaged Hair

	%W/W
Texapon MLS	45.0
Dehyton AB 30	3.0
Comperlan F	2.0
Aminodermin Richter	0.1
Water	49.9
Note: WAS 17%	
Formula No. T61-38	

Multivitamin-Shampoo

	%W/W
Texapon N25	40.0
Dehyton AB 30	6.0
Comperlan LS	3.0
Soluvit-Richter	3.0
Sodium chloride	0.3
Water	47.7
Note: WAS 16%	
Formula No. T61-39	

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Shampoo with Ampholyte

Texapon MLS	%W/W
Dehyton G	45.0
Comperlan LS	13.0
Water	1.0
Note: Viscous shampoo WAS 19%	41.0
Formula No. T61-40	

Shampoo Clear, Liquid

Texapon K14S special	%W/W
Sodium chloride	50.0
Water	5.5
Note: WAS 14%	44.5
Formula No. T61-42	

Shampoo Especially Skin Compatible

Texapon K14S special	%W/W
Texapon SBN	25.0
Sodium chloride	25.0
Water	3.0
Note: WAS 14%	47.0
Formula No. T61-45	

Shampoo, Clear

Texapon K14S 70 special	%W/W
Sodium chloride	20.0
Water	6.0
Note: WAS 14%	74.0
Formula No. T61-46	

Shampoo, Especially Skin Compatible

Texapon K14S 70 special	%W/W
Texapon SBN	10.0
Sodium chloride	25.0
Water	3.5
Note: WAS 14%	61.5
Formula No. T61-47	

Shampoo, with Sulfosuccinate

Texapon N25	%W/W
Texapon SB3	35.0
Comperlan KD	10.0
Sodium chloride	2.0
Water	3.0
Note: WAS 16%	50.0
Formula No. T61-48	

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Shampoo with Ampholyte

	<u>%W/W</u>
Texapon EVR	50.0
Dehyton AB 30	5.0
Water	45.0
Note: WAS 20%, viscous	
Formula No. T64-17	

Shampoo with Ampholyte

	<u>%W/W</u>
Texapon N25/N40	30.0
Dehyton K	5.0
Euperlan PK 771	3.0
Comperlan KD	1.0
Sodium chloride	1.0
Water	60.0
Note: WAS 12%, viscous	
Formula No. T64-19	

Shampoo Concentrate, Pearly

	<u>%W/W</u>
Texapon Z highly conc. needles	35.0
Comperlan KD	35.0
Cutina AGS	5.0
Sodium chloride	2.6
Water	22.4
Note: WAS 65%, AS 70%, pasty consistency	
When used, the concentrate is diluted with water at a ratio of 1:10. The result is a shampoo of medium viscosity.	
Preparation: The ingredients shown in the formula are mixed together and melted at approx. 75°C	
Formula No. T64-21	

Herbal Shampoo, Pearly

	<u>%W/W</u>
Texapon EVR	45.0
Hexaplant Richter	3.0
Sodium chloride	0.3
Water	51.7
Note: WAS 16%, medium viscous	
Formula No. T64-22	

Herbal Shampoo, Pearly

	<u>%W/W</u>
Texapon EVR	20.0
Texapon N25/N40	15.0
Hexaplant Richter	3.0
Water	62.0
Note: WAS 11%, viscous	
Formula No. T64-23	

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Shampoo with Conditioning Effect

	%W/W
Texapon N25	35.0
Lamepon S	10.0
Comperlan KD	5.0
Lamequat L	1.0
Nutrilan I	1.0
Viscontran MHPC 6000	0.4
Perfume	0.2
Water	47.4

Note: Medium viscous, WAS 18%

Preparation: Viscontran MHPC is initially swollen in water and the remaining ingredients are stirred in in the order shown above.

Formula No. T61-57

Shampoo, Mild

	%W/W
Texapon ASV	40.0
Dehyton G-SF	5.0
Comperlan COD	2.0
Sodium chloride	3.5
Water	49.5

Note: Viscous, WAS 16%

Formula No. T61-58

Shampoo, Mild

	%W/W
Texapon N25	43.0
Dehyton G-SF	7.5
Sodium chloride	1.5
Water	48.0

Note: Medium viscous, WAS 15%

Formula No. T61-6

Shampoo, Mild

	%W/W
Texapon N25	27.0
Dehyton G-SF	6.0
Sodium chloride	2.2
Water	64.8

Note: Low viscous, WAS 10%

Formula No. T61-62

Shampoo, Mild

	%W/W
Texapon N25	24.0
Dehyton G-SF	8.0
Sodium chloride	1.5
Water	66.5

Note: Low viscous, WAS 10%

Formula No. T61-63

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Shampoo with Jojoba Oil Substitute

	<u>%W/W</u>
I Comperlan KD	2.5
Cetiol J600	0.6
II Texapon K 14S special	54.0
Cutina EGMS	3.0
Water	20.0
III Sodium chloride	2.0
Water	17.9

Note: WAS 21%

Preparation:

Phase I: Cetiol J600 is worked into Comperlan KD.

Phase II: Cutina EGMS is melted with the Texapon, which has been diluted with some of the water, at 75C. It is cooled to approx. 40C, being stirred continuously, and the remaining ingredients and Phase I are added.

pH setting to 6.5 with citric acid.

Formula No. T64-70

Conditioning Shampoo, Pearly

	<u>%W/W</u>
Texapon N25	35.0
Lamepon S	17.0
Lamesoft 156	5.0
Lamequat L	5.0
Sodium chloride	0.7
Perfume	0.3
Water	37.0

Note: Low viscous, WAS 16%

Preparation: The ingredients are mixed in the order shown above, with the exception of Lamesoft 156, which is added last.

Formula No. T64-71

Shampoo, Pearly

	<u>%W/W</u>
Texapon N25	43.0
Lamepon S-TR	20.0
Comperlan KD	1.5
Monomuls 90-L 12	1.0
Lamesoft 156	5.0
Perfume	0.3
Sodium chloride	1.0
Water	28.2

Note: Medium viscous, WAS 23%

Preparation: Monomuls 90-L 12 is dissolved in Texapon N25 while heating. Lamepon S-TR, Comperlan KD, perfume and water are added. Finally, the pearly gloss concentrate Lamesoft T156 is added and the viscosity is regulated with sodium chloride.

Formula No. T64-73

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Shampoo, Pearly

	<u>%W/W</u>
I Texapon N25/N40	50.0
Cutina AGS	3.0
Water	20.0
II Sodium chloride	3.0
Water	24.0

Note: WAS 14%, AS 17%, medium viscous

Preparation: Cutina AGS is melted at approx. 75C in the Texapon which has been diluted with part of the water. Whilst stirring, it is cooled to approx. 40C and the remaining ingredients are added.

Formula No. T64-06

Shampoo, Pearly

	<u>%W/W</u>
Texapon Z or Texapon V highly conc. needles or Texapon LS highly conc. needles	10.0
Comperlan KD	3.0
Cutina AGS	2.0
Sodium chloride	1.0
Water	84.0

Note: WAS 12%

Preparation: The ingredients shown in the formula are mixed together and melted at approx. 75C.

Formula No. T64-08

Shampoo, Pearly

	<u>%W/W</u>
Texapon N25/N40	35.0
Euperlan PK 771	3.0
Sodium chloride	3.5
Water	58.5

Note: WAS 11%, viscous

Formula No. T64-09

Shampoo, Pearly

	<u>%W/W</u>
Texapon N25/N40	50.0
Comperlan KD	2.0
Euperlan PK 771	2.5
Sodium chloride	2.0
Water	43.5

Note: WAS 17%, viscous

Formula No. T64-10

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Shampoo, Pearly

	%W/W
I Texapon Z highly conc. needles	10.0
Comperlan KD	3.0
Water	70.0
II Sodium chloride	1.0
Water	13.5
Euperlan PK771	2.5

Note: WAS 10-13%, medium viscous

Preparation: Phase I is mixed at approx. 60C to form a clear solution. It is stirred while cooling. The remaining ingredients are added at approx. 40C.

Formula No. T64-11

Shampoo, Pearly

	%W/W
Texapon N25/N40	50.0
Euperlan PK776	2.5
Comperlan KD	2.0
Sodium chloride	2.0
Water	43.5

Note: WAS 17%, medium viscous

Formula No. T64-13

Shampoo, Pearly

	%W/W
I Texapon Z highly conc. needles	10.0
Comperlan KD	3.0
Water	70.0
II Sodium chloride	1.0
Water	13.5
Euperlan PK 776	2.5

Note: WAS 13%, viscous

Preparation: Phase I is mixed at approx. 60C to form a clear solution. It is stirred while cooling. The remaining ingredients are added at approx. 40C.

Formula No. T64-14

Shampoo, Pearly

	%W/W
Texapon N25/N40	50.0
Euperlan PK789	2.5
Comperlan KD	2.0
Sodium chloride	2.0
Water	43.5

Note: WAS 16%, medium viscous

Formula No. T64-15

SOURCE: Henkel KGaA: Cosmetic Model Formulae



Shampoo, Cloudy

	%W/W
I Texapon N40	15.0
Comperlan KD	1.0
II Texapon SBN	30.0
Sodium chloride	2.0
Cutina HR	3.0
Water	49.0

Note: WAS 14%, AS 16%, viscous

Preparation: Mix Texapon N40 with Comperlan KD, add phase II, in which Cutina HR has already been melted at 90C and cooled under continuous stirring, and preserve at a temperature below 40C.

Formula No. T63-01

Anti-Dandruff Shampoo, Cloudy

	%W/W
Texapon N40	43.0
Lamepon UD	19.0
Nutrilan L	4.5
Monomuls 90-L 12	2.0
Glucamate DOE-120	2.0
Veegum HV, 2% preswelling	27.2
Zinc-pyrion 48% susp.	2.0
Perfume	0.3

Note: Viscous, WAS 23%

Preparation: Monomuls 90-L 12 and Glucamate DOE 120 are dissolved in Texapon N40 while being heated. The remaining ingredients are then added in the order shown above. The zinc-pyrion suspension and the perfume are added when the temperature is under +40C.

Formula No. T63-03

Shampoo, Pearly

	%W/W
Texapon SG	33.0
Comperlan KD	3.5
Water	63.5

Note: WAS 12%, viscous

Formula No. T64-02

Shampoo, Pearly

	%W/W
Texapon SG	20.0
Texapon N25/N40	20.0
Comperlan KD	4.0
Water	56.0

Note: WAS 14%, high viscous

Formula No. T64-04

SOURCE: Henkel KGaA: Cosmetic Model Formulae

**Shampoo Plus Conditioner**  
**Plus UV Protection**  
**Formula 93-0401**

This one-step shampoo conditioner and UV protector demonstrates rich-lathering properties, while it conditions and protects the hair. Comprised of two protein-substantive conditioning agents and an ultraviolet absorber, this unique formula detangles snarled hair and significantly reduces comb drag, while protecting the hair from the harsh effects of sunlight.

**A. Component** **% By Weight**

Water	25.65
Jaguar C-14S	0.30
25% Citric Acid Solution	Q.S. to pH 4.0-4.5

Heat water to 50C. With rapid but smooth agitation, slowly disperse Jaguar C-14S in water. Adjust pH to 4.0-4.5 with citric acid solution, as needed. With pH adjustment, the system will thicken.

<b>B. Rhodapex ESY</b>	<b>30.0</b>
Ammonium Xylene Sulfonate (40% Aq.)	2.0
25% Citric Acid Solution	Q.S. to pH 5.7-6.3

Slowly blend Rhodapex ESY and AXS-40 into heated water system. Mix until completely uniform. Adjust formulation pH to 5.7-6.3 with citric acid solution, as needed. With smooth agitation, continue to heat system to 70-75C.

<b>C. Varisoft TC-90 (Sherex)</b>	<b>0.50</b>
Cetyl Alcohol NF	0.40
Stearyl Alcohol	0.40
Alkamuls EGDS	2.00
Syntase 62	1.00

In a separate mixing vessel, combine "C" ingredients. Heat "C" ingredients (do not scorch) until clear and molten. With rapid but smooth agitation, slowly blend molten "C" phase into 70-75C water phase. Mix until completely uniform.

<b>D. Alkamide C-212</b>	<b>1.70</b>
Rhodapon L-22HNC	36.00
25% Citric Acid Solution	Q.S. to pH 5.7-6.3

Slowly blend Alkamide C-212 into heated system and mix until completely uniform. Slowly blend Rhodapon L-22HNC into system. Once uniform, adjust formulation pH to 5.7-6.3 with citric acid, as needed. With smooth agitation, cool system to 40-45C.

<b>E. Kathon CG (Rohm and Haas)</b>	<b>0.05</b>
Fragrance and Dye	Q.S.

Slowly blend Kathon CG and compatible fragrance and dye into system. Mix until uniform. Sodium chloride may be added in trace concentrations (0.05-0.10%) to increase viscosity, if needed. Ammonium xylene sulfonate may be added to decrease viscosity, if needed.

**Typical Formulation Properties**

Appearance:	Opaque, pearlescent liquid
pH:	5.7-6.3
Viscosity @ 25C (No. 4 Spindle @ 10 rpm):	10,000-15,000 cps

**SOURCE: Rhone-Poulenc Surfactants & Specialties: Formulas**

Shampoo Shower Bath Combination, Pearly

	<u>%W/W</u>
I Hydagen P	2.0
Texapon EVR	10.0
II Texapon EVR	35.0
Dehyton AB 30	3.0
Cetiol HE	2.0
Water	48.0

Note: WAS 17%, viscous

Preparation: The products of phase I are stirred at 50-60C until homogeneous. The remaining ingredients are added below 40C.

Formula No. T64-49

Lecithin Shampoo, Pearly

	<u>%W/W</u>
Texapon MLS	40.0
Euperlan PK 771	3.0
Dehyton K	5.0
Comperlan LS	3.0
Lecithin CLR water dispersible	2.0
Water	47.0

Note: WAS 15%

Formula No. T64-51

Lecithin-Egg Shampoo, Pearly

	<u>%W/W</u>
Texapon MLS	20.0
Texapon EVR	25.0
Dehyton K	5.0
Lecithin CLR (water dispersible)	1.0
Egg yolk, liquid, techn.	1.0
Sodium chloride	0.4
Water	47.6

Note: WAS 17%

Formula No. T64-52

Vitamin Shampoo, Pearly

	<u>%W/W</u>
Texapon N25	40.0
Euperlan PK 771	1.0
Comperlan OD	4.0
Vitamin F CLR (water soluble)	2.0
Sodium chloride	0.7
Water	52.3

Note: WAS 15%

Formula No. T64-53

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Shampoo, with Vitamin E

	<u>%W/W</u>
Comperlan OD	1.5
Vitamin E/Covitol 1100	0.5
Perfume	0.2
Texapon NSO	35.0
Dehyton AB 30	8.0
Sodium chloride	1.5
Water	53.3
Note: WAS 14%	
Formula No. T61-73	

Shampoo with Vitamin E

	<u>%W/W</u>
Comperlan KD	1.5
Vitamin E/Covitol 1100	0.5
Perfume	0.2
Texapon NSO	35.0
Dehyton K	8.0
Sodium chloride	2.0
Water	52.8
Note: WAS 14%	
Preparation: The ingredients are mixed together in the order shown above, without heating.	
Formula No. T61-75	

Shampoo with Ampholyte in Gel Form

	<u>%W/W</u>
Texapon N25/N40	50.0
Dehyton AB 30	20.0
Water	30.0
Note: WAS 20%, high viscous	
Formula No. T62-01	

Shampoo in Gel Form

	<u>%W/W</u>
I Texapon N70	15.0
Comperlan KD	3.0
II Sodium chloride	2.4
Water	7.0
III Water	72.6
Note: WAS 13%, high viscous	
Preparation: Phase I is prepared and mixed. Then the sodium chloride, which has been pre-dissolved in a small amount of water, is added. The rest of the water is gradually stirred in and the mixture is preserved.	
Formula No. T62-02	

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Shampoo with Sulfosuccinate

	<u>%W/W</u>
Texapon N25	25.0
Texapon SB 3	15.0
Comperlan KD	2.0
Sodium chloride	4.5
Water	53.5
Note: WAS 15%	
Formula No. T61-49	

Shampoo with Jojoba Oil Substitute

	<u>%W/W</u>
Texapon MLS	23.5
Texapon N25	27.0
Eumulgin R0 40	2.5
Comperlan KD	3.0
Cetiol J600	0.3
Sodium chloride	2.0
Water	41.7
Note: WAS 20%, pH set to 6.5 with citric acid.	
Formula No. T61-51	

Shampoo for Greasy Hair

	<u>%W/W</u>
Texapon N25	43.0
Lamepon S-TR	20.0
Comperlan KD	1.5
Lamepon PA-TR	5.0
Perfume	0.3
Sodium chloride	2.0
Water	28.2
Note: Viscous, WAS 21%	
Formula No. T61-52	

Shampoo for Sensitive Scalps

	<u>%W/W</u>
Texapon N25	30.0
Lamepon S-TR	30.0
Nutrilan L	6.0
Perfume	0.3
Sodium chloride	1.5
Water	32.2
Note: Low viscous, WAS 18%	
Formula No. T61-53	

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Silk Neutralizing Shampoo

	%W/W
Bio-Terge AS-40 (Sodium C14-16 Olefin Sulfonate)	22.0
Amphosol CA (Cocamidopropyl Betaine)	14.0
Ammonyx CDO (Cocamidopropylamine Oxide)	5.0
Deionized Water	56.0
Cationic Collagen Polypeptides	2.5
Amino-Silk SF (Silk Amino Acids)	0.5
Preservative, Fragrance	q.s.
Citric Acid	q.s. to pH=4

**Procedure:**

Mix all components together except the citric acid. Adjust pH to 4 with citric acid.

**Properties:**

A mild, low pH shampoo which neutralizes and re-conditions at the same time. Cationic Collagen Polypeptides, a cationic high molecular weight protein, protects and smooths the hair shaft to counteract damage due to harsh processing. Amino-Silk SF adds shine and bounce to the hair.

Formula #HS-300

Enriched Protein & Honey Shampoo

	%W/W
A. Deionized Water	23.80
Quat-Pro S (Stearyltrimonium Hydroxy Ethyl Hydrolyzed Collagen)	1.00
Methylparaben	0.20
B. May-Tein C (Potassium Cocoyl Hydrolyzed Collagen)	30.00
Standapol ES-2 (Sodium Laureth Sulfate)	25.00
Collagen Hydrolyzate Cosmetic 55 (Hydrolyzed Collagen)	5.00
Honey	1.00
Lemon juice	5.00
Monateric CAB (Cocamidopropyl Betaine)	5.00
Sodium Chloride	2.50
C. Dowicil 200 (Quaternium-15)	0.20
Polysorbate 20	1.00
Fragrance	0.30
Q.S. to pH = 5.5 with Citric Acid or Potassium Hydroxide as needed.	

**Procedure:**

1. Mix and heat phase A until homogeneous.
2. Add phase A to phase B. Mix.
3. Pre-mix phase C and add to phase A/B. Mix.

**Properties:**

A viscous, but mild shampoo. Enriched with natural ingredients. Lemon juice and quaternized protein supply good manageability and an attractive sheen. May-Tein C and Quat-Pro S provide lubricity and conditioning. The Hydrolyzed Collagen coats and protects the hair as well as adding body.

Formula #HS-109

SOURCE: Maybrook Inc.: Suggested Formulations

Softening Shampoo, Pearly

	%W/W
I Texapon EVR	25.0
Texapon N25	25.0
Sodium chloride	0.8
Water	18.7
II Cosmedia Guar C261	0.5
Water	30.0

Note: WAS 16%, viscous

Preparation: Cosmedia Guar C261 is stirred into hot water and pre-swollen. When cold it is stirred into phase I.

Formula No. T64-55

Silken Sheen Shampoo, Softening

	%W/W
I Texapon SG	60.0
Comperlan KD	2.5
Water	6.7
II Cosmedia Guar C261	0.8
Water	30.0

Note: WAS 15%

Preparation: Cosmedia Guar C261 is stirred into hot water and pre-swollen. When cold it is stirred into phase I.

Formula No. T64-57

Softening Shampoo, Pearly

	%W/W
I Texapon N40	40.0
Comperlan KD	2.0
Euperlan PK 789	5.0
Sodium chloride	2.0
Water	20.5
II Cosmedia Guar C261	0.5
Water	30.0

Note: WAS 15%

Preparation: Cosmedia Guar C261 is stirred into hot water and pre-swollen. When cold it is stirred into phase I.

Formula No. T64-59

Softening Shampoo, Pearly

	%W/W
I Texapon N40	50.0
Comperlan KD	2.0
Euperlan PK 776	4.0
Sodium chloride	1.2
Water	12.0
II Cosmedia Guar C261	0.8
Water	30.0

Note: WAS 17%

Preparation: Cosmedia Guar C261 is stirred into hot water and pre-swollen. When cold it is stirred into phase I.

Formula No. T64-60

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Vege-Clean Conditioning Shampoo

	%W/W
A. Bioterge AS-40 (Sodium C16-18 Olefin Sulfonate)	40.00
Monamid 150-LW (Lauramide DEA)	3.00
Deionized Water	46.80
Supro-Tein S (Sodium Cocoyl Hydrolyzed Soy Protein (and) Sorbitol)	5.00
Soy-Quat C (Cocodimonium Hydroxypropyl Hydrolyzed Soy Protein)	1.50
Soy-Tein NL (Hydrolyzed Soy Protein)	1.50
Kessco PEG 6000 DS	1.00
Sodium Chloride	1.00
B. Fragrance	0.2
Preservative	q.s.
Citric Acid	q.s. to pH 6.5

Procedure:

Mix and heat Phase A to 60C. Mix until homogeneus. Mix and cool to 40C. Add Phase B.

Properties:

Vegetable-based surfactants and quaternaries give this conditioning shampoo an extra boost. An effective cleanser, this formula provides a creamy, stable foam. Conditioning and mildness are provided by the Soy-Tein NL and Supro-Tein S. Supro-Tein S is a foaming protein which gently cleans and is biodegradable. Soy-Quat C is a cationic, quaternized soy protein which adds highlights to the hair and improves wet and dry combing.

SOURCE: Maybrook Inc.: Formula #HS-201

High Foaming 2 in 1 Shampoo

	Weight, %
Ammonium Lauryl Sulfate (28%)	65.0
Mackalene 426	6.0
Mackanate DC-50	4.0
Mackester EGDS	1.0
Mackamide PKM	2.0
Mackernium 007	2.0
Paragon Preservative	q.s.
Water, Dye, Fragrance qs to	100.0

Procedure:

1. Combine the first five components and heat to 70C with continuous mixing.
2. Dilute the Mackernium 007 in the remaining water and slowly add to the blend.
3. Blend until product is homogeneous and cool to 50C.
4. Add Paragon preservative, fragrance and dye.
5. Adjust pH with citric acid to 5.0-6.0 and cool.

SOURCE: McIntyre Group Ltd.: Suggested Formulation



Vitamin Shampoo, Pearly

	%W/W
Texapon EVR	45.0
Soluvit Richter	2.0
Sodium chloride	0.4
Water	52.6
Note: WAS 16%, viscous	
Formula No. T64-25	

Pearly Gloss Shampoo with Arnica Tincture

	%W/W
Texapon N25/N40	20.0
Texapon EVR	20.0
Cetiol HE	10.0
Arnica Tincture	0.5
Water	49.5
Note: WAS 13%, viscous	
Formula No. T64-27	

Pearly Gloss Shampoo with Egg

	%W/W
Texapon EVR	45.0
Egg yolk, liquid	2.0
Sodium chloride	0.3
Water	52.7
Note: WAS 16%, viscous	
Formula No. T64-28	

Pearly Gloss Shampoo with Egg

	%W/W
Texapon SG	40.0
Texapon N25/N40	20.0
Egg yolk, liquid	0.7
Sodium chloride	1.5
Water	37.5
Note: WAS 14%, medium viscous	
Formula No. T64-29	

Pearly Gloss Shampoo with Egg

	%W/W
Texapon SG	40.0
Texapon IES	20.0
Egg yolk, liquid, techn.	0.7
Sodium chloride	1.5
Water	37.8
Note: WAS 21%, medium viscous	
Formula No. T64-30	

SOURCE: Henkel KGaA: Cosmetic Model Formulae

**Wash N' Style Family Shampoo**

	<u>%W/W</u>
A. Monamid CMA (Cocamide MEA)	5.00
Proto-Lan 8*	0.50
B. Ammonium Lauryl Sulfate	30.00
Supro-Tein V (TEA-Cocoyl-Hydrolyzed Collagen (and) Sorbitol)	10.00
C. Deionized Water	47.90
Quat-Pro S (Stearyltrimonium Hydroxyethyl Hydrolyzed Collagen)	1.00
Kera-Tein 1000 (Hydrolyzed Keratin)	5.00
Methylparaben	0.20
Kathon CG	0.10
D. Citric Acid, to pH=6.0	q.s.
Fragrance	q.s.
NaCl (as needed for desired viscosity)	q.s.
*(Lecithin (and) Butyl Stearate (and) Cocoyl Hydrolyzed Collagen (and) Oleoyl Sarcosine (and) Sesame Oil (and) Lanolin Alcohol)	

**Procedure:**

1. Heat Monamid until melted. Add the Proto-Lan 8 and mix.
2. Warm phase B to 65C. Add phase A to phase B. Mix.
3. Warm phase C to 60C. Add phase A/B to C. Mix.
4. Adjust pH and add fragrance. Mix.

**Properties:**

Ideal family shampoo. Based on efficient cleansers and state-of-the-art hair repair and conditioning ingredients. Achieves and maintains optimum hair beauty for normal, oily, and dry hair and scalp. Particularly beneficial for bleached, permed, over-processed hair, providing body, sheen, soft feel and adding to tensile strength.

SOURCE: Maybrook Inc.: Formulation #HS-110

**Wheat Germ Oil & Honey Shampoo**  
(Formula 86-0106)

	<u>% by Weight</u>
Rhodapex NA 61	10.0
Mirataine BET-C 30	3.5
Alkamide DC-212/S	1.5
Honey	0.025
Wheat Germ Oil	0.025
Citric Acid	Q.S. to pH 6-6.5
Fragrance, Dye, Preservative	Q.S.
Sodium Chloride	1.5-2.5
Water	83.95

**Blending Procedure:**

1. Charge water into mixing vessel.
2. With rapid but smooth agitation, slowly blend in Rhodapex NA 61 and Mirataine BET-C 30. Mix until completely uniform.
3. In a separate container, disperse honey and wheat germ oil in Alkamide DC-212/S and mix until uniform. With smooth agitation, slowly add this blend to shampoo system. Mix until shampoo is completely clear and uniform.
4. Adjust pH of system to 6.0-6.5 with citric acid, as needed.
5. Add compatible fragrance, dye and preservative.
6. Adjust shampoo viscosity to 1,000-1,500 cps with incremental additions of sodium chloride, as needed.

**CTFA Identification:**

Water, Sodium Laureth Sulfate, Sodium Chloride, Cocamide DEA, Cocamidopropyl Betaine, Wheat Germ Oil, Honey, Citric Acid, Preservative, Fragrance, Dye.

**Pearlescent Cream Shampoo**  
(Formula 83-0902M)

	<u>% By Weight</u>
Rhodapon SB 8208S	33.0
Mirasheen 202	10.0
Citric Acid	Q.S. to pH 5-6
Fragrance, Dye(s), Preservative	Q.S.
Sodium Chloride	1.5-2.5
Water	55.0

**Blending Procedure:**

Charge water into mixing vessel. With smooth agitation, slowly blend in Rhodapon SB 8208S and Mirasheen 202. Mix until completely uniform. Adjust formulation pH to 5-6 with citric acid as needed and then add compatible Fragrance, Dye(s), and Preservative. Adjust formulation viscosity to 2,000-4,000 cps with the judicious addition of Sodium Chloride as needed.

**Typical Formulation Properties**

Appearance @ 25C:	Opaque/Pearlescent Liquid
pH:	5-6
Viscosity @ 25C:	2,000-4,000 cps
% Non Volatiles:	15-17

**CTFA Identification:** Water, Sodium Lauryl Sulfate, Glycol Stearate, Sodium Chloride, Lauramide DEA, Cocamidopropyl Betaine, Glycerine, Fragrance, Preservative, Citric Acid, Dye(s).

**SOURCE:** Rhone-Poulenc Surfactants & Specialties: Formulas

Wig Shampoo

	<u>%W/W</u>
Texapon MLS	30.0
Dehyton AB30	5.0
Comperlan OD	3.0
Water	62.0

Note: WAS 14%, viscous  
Formula No. T68-01

Wig Shampoo, Cationic

	<u>%W/W</u>
Dehyton AB30	40.0
Eumulgin C4	15.0
Dehyquart LT	5.0
Comperlan KD	2.0
Water	38.0

Note: WAS 31%, low viscous  
Formula No. T68-02

Wig Shampoo, Cationic

	<u>%W/W</u>
Dehydol 100DEO	25.0
Dehyquart A	15.0
Eumulgin O 10	5.0
Water	55.0

Note: WAS 34%, low viscous  
Formula No. T68-03

Wig Shampoo

	<u>%W/W</u>
Texapon N25	55.0
Comperlan KD	1.8
Nutrilan L	5.0
Perfume	0.3
Sodium Chloride	1.5
Water	36.4

Note: WAS 15%, viscous  
Formula No. T68-04

SOURCE: Henkel KGaA: Cosmetic Model Formulae

**2-in-1 Conditioning Shampoo**

Thick, stable shampoo having good cleaning and conditioning properties for the hair.

<u>Ingredient:</u>	<u>Weight%</u>	<u>Function</u>
<b>Part A:</b>		
Deionized Water	34.10	Diluent
Ammonium Lauryl Sulfate (28%) (1)	34.00	Surfactant
Ammonium Laureth Sulfate (27%) (2)	9.25	Surfactant
<b>Part B:</b>		
Carbopol 1382 (3)	0.75	Suspension Stabilizer
Cocamide DEA (4)	3.50	Foam Stabilizer
<b>Part C:</b>		
Dimethicone (100,000 cs) (5)	1.00	Lubricant
Olealkonium Chloride (6)	0.50	Conditioner
<b>Part D:</b>		
Deionized Water	15.00	Diluent
Disodium EDTA	0.10	Chelant
DMDM Hydantoin (7)	0.40	Preservative
Guar Hydroxypropyltrimonium Chloride (8)	0.20	Conditioner
NaOH (10%)	1.00	Neutralizing Agent
<b>Part E:</b>		
Fragrance (9)	0.20	
(1) Standapol A (Henkel)		
(2) Standapol EA-3 (Henkel)		
(3) Carbomer (BFGoodrich)		
(4) Standamid KD (Henkel)		
(5) 200 Fluid (Dow Corning)		
(6) M-Quat JO 50 (PPG-Mazer)		
(7) Glydant (Lonza)		
(8) N-Hance (Aqualon)		
(9) Shampoo Fragrance A62120/794457 (Haarman & Reimer)		

**Preparation Procedure:**

1. Combine Part A ingredients, slowly mix, heat to 50C.
2. Separately heat Cocamide DEA to 50, slowly mix in Carbopol, forming a paste, add to Part A with moderate speed, mixing 30 minutes.
3. Separately combine Part C ingredients, heat to 50C, slowly mix to combine with Parts A and B with moderate speed mixing.
4. Separately add guar into first three ingredients of Part D, when dispersed add NaOH, combine with Parts A, B, and C, with slow agitation for 20 minutes until 40C.
5. Add Part E and mix slow agitation for 20 minutes.

**SOURCE:** BF Goodrich Co.: Formula C-0039

2-in-1 Conditioning Shampoo

A synergistic mixture of Veegum HS Magnesium Aluminum Silicate and hydroxypropyl guar thickens this shampoo to maintain the mica and titanium dioxide in suspension. Vanseal CS, renowned for its mildness to the skin and eyes, enhances the quality and quantity of lather produced by this formula. It also acts as a conditioning agent, augmenting the conditioning effect of stearalkonium chloride.

<u>Ingredient:</u>	<u>% by Weight*</u>
A: Veegum HS Magnesium Aluminum Silicate	1.30
Hydroxypropyl Guar**	1.30
Deionized Water	60.35
B: Citric Acid	0.05
Ammonium Lauryl Sulfate	30.00
Vanseal CS Cocoyl Sarcosine	3.00
C: Stearalkonium Chloride, 25%	3.00
D: Mica (and) Titanium Dioxide***	1.00
Sodium Hydroxide Solution to pH 6.0	q.s.
Preservative, Dye, Fragrance	q.s.

\*As Received Basis

\*\*Jaguar HP-60

\*\*\*Timeron Super Copper

Mixing Procedure:

Heat the water in part A to 50C. Add the Veegum HS slowly to the water while stirring with a propeller mixer at 1800 rpm. Mix 1 hour. Add the hydroxypropyl guar and mix 3 minutes. Deaerate. Slow the mixer to avoid air entrapment and foam generation. Add the part B ingredients in the order shown, mixing each until smooth and uniform. Heat part C to 50C and add slowly to A and B. Cool to 30C or less and add part D ingredients in the order shown, mixing each until smooth and uniform.

Formula Properties:

Viscosity: 10,000-15,000 cps (Brookfield Model LVT at 60 RPM)

pH: 5.8 to 6.2

Appearance: Smooth, uniform, pourable lotion

SOURCE: R.T. Vanderbilt Co., Inc.: Formula No. 454

# **Section X**

## **Shaving Products**

After Shave Balm

<u>Ingredient:</u>	<u>Weight%</u>	<u>Function</u>
<b>Part A:</b>		
Deionized Water	90.00	Diluent
Glycerin	3.00	Humectant
Dimethicone Copolyol (1)	1.00	Humectant/ Lubricant
Polysorbate 80 (2)	0.10	Surfactant
Allantoin	0.10	Skin Conditioner
<b>Part B:</b>		
Cyclomethicone (3)	4.00	Lubricant
Decyl Oleate (4)	0.50	Emollient
Pemulen TR-1	0.25	Emulsifier/ Stabilizer
<b>Part C:</b>		
Triethanolamine, 99%	0.25	Neutralizing Agent
<b>Part D:</b>		
Propylene Glycol (and) Diazolidinyl Urea (and) Methyl Paraben (and) Propyl Paraben (6)	0.80	Preservative
Fragrance	q.s.	

- (1) Dow Corning 190 Surfactant (Dow Corning)
- (2) Tween 80 (ICI Americas)
- (3) Dow Corning 245 Fluid (Dow Corning)
- (4) Ceraphyl 140 (Van Dyk)
- (5) CTFA Acrylates/C10-C30 Alkyl Acrylate Crosspolymer  
(BFGoodrich)
- (6) Germaben II (Sutton Labs)

**Preparation Procedure:**

- 1) Combine Part A ingredients. Mix until homogeneous.
- 2) Combine Part B ingredients in a separate vessel. Mix to break-up any soft lumps of Pemulen.
- 3) With moderate agitation, add Part B to Part A. Mix for 15-30 minutes.
- 4) Add Part C. As emulsion thickens, increase rate of mixing to produce a smooth, opaque product.
- 5) Mix Part D ingredients into emulsion.

**SOURCE:** BF Goodrich Co.: Formula P0003



After Shave Balm

Smooth application and non-stinging emolliency are features of this translucent gel formulation.

<u>Ingredient (CTFA):</u>	<u>Weight%</u>	<u>Function</u>
<b>Part A:</b>		
Deionized Water	88.65	Diluent
Glycerin	3.00	Humectant
Dimethicone Copolyol (1)	0.75	Humectant/ Lubricant
Polysorbate 80 (2)	0.15	Particle Size Reduction
Allantoin	0.10	Skin Conditioner
Disodium EDTA	0.10	Chelating Agent
<b>Part B:</b>		
Cyclomethicone (3)	4.00	Lubricant
Fragrance, Noville #28819	0.75	
Decyl Oleate (4)	0.50	Emollient
Pemulen TR-1 (5)	0.20	Emulsifier
Carbopol 954 (6)	0.40	Thickener
<b>Part C:</b>		
Triethanolamine (99%)	0.60	Neutralizing Agent
<b>Part D:</b>		
Propylene Glycol (and) Diazolidinyl Urea (and) Methylparaben (and) Propylparaben (7)	0.80	Preservative
(1) 193 Surfactant (Dow Corning)		
(2) Protasorb 0-20 (Protemeen Chemicals), Tween 80 (ICI)		
(3) 345 Fluid (Dow Corning)		
(4) Ceraphyl 140 (Van Dyk)		
(5) Acrylates/C10-30 Alkyl Acrylate Crosspolymer (BF Goodrich)		
(6) Carbomer (BF Goodrich)		
(7) Germaben II (Sutton Labs)		

**Preparation:**

1. Combine Part A ingredients in a vessel which will contain the entire formulation. Mix until homogeneous.
2. In a separate vessel, blend part B ingredients. Pemulen and Carbopol should be slurried in this phase. Disrupt any soft lumps of these resins.
3. With moderate agitation, add Part B to Part A. Mix for 10-15 minutes and then add Part C. Mix vigorously to produce a smooth, glossy product.
4. Mix Part D into emulsion.

SOURCE: BF Goodrich Co.; Formula P0011

After Shave Balm

Smooth application and non-stinging emolliency are features of this translucent gel formulation.

<u>Ingredient (CTFA)</u>	<u>Weight%</u>	<u>Function</u>
<b>Part A:</b>		
Deionized Water	88.65	Diluent
Glycerin	3.00	Humectant
Dimethicone Copolyol (1)	0.75	Humectant/ Lubricant
Polysorbate 80 (2)	0.15	Particle Size Reduction
Allantoin	0.10	Skin Conditioner
Disodium EDTA	0.10	Chelating Agent
<b>Part B:</b>		
Cyclomethicone (3)	4.00	Lubricant
Fragrance, Noville #28819	0.75	
Decyl Oleate (4)	0.50	Emollient
Pemulen TR-1 (5)	0.20	Emulsifier
Carbopol 5984 (6)	0.40	Thickener
<b>Part C:</b>		
Triethanolamine (99%)	0.60	Neutralizing Agent
<b>Part D:</b>		
Propylene Glycol (and) Diazolidinyl Urea (and) Methylparaben (and) Propylparaben (7)	0.80	Preservative
(1) 193 Surfactant (Dow Corning)		
(2) Protasorb O-20 (Protameen Chemicals), Tween 80 (ICI)		
(3) 345 Fluid (Dow Corning)		
(4) Ceraphyl 140 (Van Dyk)		
(5) Acrylates/C10-30 Alkyl Acrylate Crosspolymer (BFGoodrich)		
(6) Carbomer (BFGoodrich)		
(7) Germaben II (Sutton Labs)		

**Preparation:**

1. Combine Part A ingredients in a vessel which will contain the entire formulation. Mix until homogeneous.
2. In a separate vessel, blend Part B ingredients. Pemulen and Carbopol should be slurried in this phase. Disrupt any soft lumps of these resins.
3. With moderate agitation, add Part B to Part A. Mix for 10-15 minutes and then add Part C. Mix vigorously to produce a smooth, glossy product.
4. Mix Part D into emulsion.

SOURCE: BF Goodrich Co.: Formula P0032

After Shave Balm

Smooth application and non-stinging emolliency are features of this translucent gel formulation.

<u>Ingredient (CTFA):</u>	<u>Weight%</u>	<u>Function</u>
Part A:		
Deionized Water	88.65	Diluent
Glycerin	3.00	Humectant
Dimethicone Copolyol (1)	0.75	Humectant/ Lubricant
Polysorbate 80 (2)	0.15	Particle Size Reduction
Allantoin	0.10	Skin Conditioner
Disodium EDTA	0.10	Chelating Agent
Part B:		
Cyclomethicone (3)	4.00	Lubricant
Fragrance (8)	0.75	
Decyl Oleate (4)	0.50	Emollient
Pemulen TR-1 (5)	0.20	Emulsifier
Carbopol 5984 (6)	0.40	Thickener
Part C:		
Triethanolamine (99%)	0.60	Neutralizing Agent
Part D:		
Propylene Glycol (and) Diazolidinyl Urea (and) Methylparaben (and) Propylparaben (7)	0.80	Preservative

- (1) 190 Surfactant (Dow Corning)
- (2) Protasorb O-20 (Protameen Chemicals), Tween 80 (ICI)
- (3) 345 Fluid (Dow Corning)
- (4) Ceraphyl 140 (Van Dyk)
- (5) Acrylates/C10-30 Alkyl Acrylate Crosspolymer (BFGoodrich)
- (6) Carbomer (BFGoodrich)
- (7) Germaben II (Sutton Labs)
- (8) Men's Fragrance A62119/794456 (Haarman & Reimer)

**Procedure:**

- Combine Part A ingredients in a vessel which will contain the entire formulation. Mix until homogeneous.
- In a separate vessel, blend Part B ingredients. Pemulen and Carbopol should be slurried in this phase. Disrupt any soft lumps of these resins.
- With moderate agitation, add Part B to Part A. Mix for 10-15 minutes and then add Part C. Mix vigorously to produce a smooth, glossy product.
- Mix Part D into emulsion.

SOURCE: BF Goodrich Co.: Formula P0033

After-Shave Cream

	%W/W
I Carbopol 934	1.00
Ethyl alcohol 96%	30.00
Water	26.75
II Triethanolamine	1.50
Water	5.00
III Cutina MD	3.00
Eumulgin B2	1.00
Cetiol LC	5.00
Water	26.75

**Preparation:**

Allow I to swell, neutralize with II, process III into a cream at 70C and add it to the gel produced.

Formula No. D12-01

After-Shave Gel

	%W/W
I Menthol	0.2
Ethyl alcohol 96%	50.0
II Water	42.6
Boric acid	0.2
III Carbopol 940	0.8
IV Triethanolamine	1.2
Cetiol HE	5.0

**Preparation:**

Dissolve I and add II in a dissolved state. Stirring quickly, allow III to swell in the alcoholic/aqueous solution. Stir in IV to neutralize.

Formula No. D12-02

After Shave Tonic

	%W/W
Ethanol 96%	40.0
Monomuls 90-L 12	1.0
Lamacit GML 20	10.0
Allantoin	0.2
Irgasan DP 300	0.1
Perfume	0.8
Water	47.9

**Preparation:**

Monomuls 90-L 12 is dissolved in Lamacit GML at 70C and the perfume is added. Ethanol and water are then added and, finally, allantoin and Irgasan DP 300 are dissolved, stirring thoroughly.

The pH is adjusted with lactic acid.

Formula No. D51-05

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Aftershave GelIngredients:

	<u>% by Weight</u>
A. Ethanol, 96% denatured	60.00
Perfume oil	2.00
Menthol	0.10
Cremophor RH 60	0.80
Uvinul D 50	0.05
B. Water, distilled	25.10
Allantoin	0.10
EDTA Acid	0.05
C. Carbomer 980	0.50
D. Water, distilled	10.00
Tris Amino	0.60

Procedure:

- Part A: Dissolve perfume oil, menthol, Cremophor RH 60 and Uvinul D 50 in ethyl alcohol.
- Part B: Dissolve allantoin and EDTA in water and stir part B into part A.
- Part C: Gently sift Carbomer 980 into the combined Parts A and B while maintaining good agitation of the mixture. Continue stirring until the Carbomer has been completely dispersed.
- Part D: Dissolve Tris Amino in the water and stir into parts A, B and C in order to neutralize the Carbomer. A highly viscous, transparent gel is obtained. The pH value of the gel should be approximately 7.0-7.5.

SOURCE: Angus Chemical Co.: Angus Product Formulary: Suggested Formulation PF-0189E

Pre-shave Lotion

Slightly yellow, clear, low viscosity.

Material/CTFA-Index:

A: Ethanol/Alcohol (Cosmetic grade)	75.00%
B: Belsil DMC 6031/Dimethicone Copolyol	4.00
Adol 66/Isostearyl Alcohol	2.50
Isopropyl Myristate	5.00
Rewolan AWS/PEG-75 Lanolin oil	2.50
C: Water	11.00

Mix B into A stirring lightly. Add C stirring lightly. Stir until a clear solution is formed.

Temperature stability: at 45C over 10 weeks.

SOURCE: Wacker Silicone: Formulation 351 AH

Shaving Cream

	%W/W
I Edenor K 1218	6.40
Edenor C 14 92-96%	11.20
Siegert Stearin L4	11.20
II Potassium hydroxide	7.54
Sodium hydroxide	0.39
Henkel Glycerin 86% DAB 9	6.00
Triethanolamine	1.05
III Water	38.84
IV Siegert Stearin L4	11.20
V Texapon CS paste	3.00
Eutanol G	2.00
VI Menthol	0.20
Perfume	1.00

**Preparation:**

Melt I at 80C on the water bath, dissolve II in III and heat to 80C. Stir this solution into I (saponification). The stirring process lasts at least 1h at a temperature of 80C. Melt IV at 80C and gradually add it to the mixture. After cooling to 50C, V is reduced to reduced to approx. 40C and also stirred. VI is added at a temperature of 30C. The lost water is finally replaced. The shaving cream is mechanically homogenized once. The process is repeated after 24 h, after which packaging takes place.

Note: Max. pH 11

Formula No. D11-01

Shaving Cream

	%W/W
I Edenor K8-18	10.0
Siegert Stearin L4	28.0
Henkel Glycerin 86% DAB 9	17.0
Water	23.0
II Potassium hydroxide solution 45%	15.0
Sodium hydroxide solution 45%	2.5
III Siegert Stearin L4	3.5
IV Perfume	1.0

**Preparation:**

Melt I at 80C on the water bath, dissolve II in III and heat to 80C. Stir this solution slowly into I (saponification). The stirring process lasts at least 0.5 h at a temperature of 80C. Melt IV at 80C and gradually add it to the mixture. After cooling to 50C, V is reduced to approx. 40C and also stirred. VI is added at a temperature of 30C. The lost water is finally replaced. The shaving cream is mechanically homogenized once. The process is repeated after 24 h, after which packaging takes place.

Note: Max. pH 11

Formula No. D11-03

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Shaving Cream

	%W/W
I Edenor K 1218	9.30
Edenor C14 92-94%	2.50
Siebert Stearin L4	12.60
II Sodium hydroxide	0.21
Potassium hydroxide	7.00
Henkel Glycerin 86% DAB 9	5.00
III Water	40.09
IV Siebert Stearin L4	12.60
Comperlan HS	1.50
Polywax 1550	5.20
V Texapon CS paste	3.00
VI Perfume	1.00

Preparation:

Melt I at 80C on the water bath. Dissolve II in III and heat to 80C. Stir the solution slowly into I (saponification). The stirring process lasts at least 0.5 h at a temperature of 80C. Melt IV at 80C and gradually add it to the mixture. After cooling to 50C, V is reduced to approx. 40C and also stirred. VI is added at a temperature of 30C. The lost water is finally replaced. The shaving cream is mechanically homogenized once. The process is repeated after 24 h, after which packaging takes place.

Note: Max. pH 11

Formula D11-02

Shaving Foam, Aerosol-Packed

	%W/W
I Shaving cream D11-02	20.0
Texapon TH	2.0
Aethoxal B	5.0
II 1,2-propylene glycol	5.0
Water	68.0

Preparation: Mix I, add to II and then homogenize mechanically.

Filling: 92 parts above mixture

8 parts propellant Frigen 12

Note: Max. pH 11

Formula No. D71-01

Shaving Foam, Aerosol-Packed

	%W/W
I Shaving cream D11-02	20.0
Texapon TH	2.0
Cetiol HE	5.0
II 1,2-propylene glycol	5.0
Water	68.0

Preparation: Mix I, add II and then homogenize mechanically.

Filling: 92 parts above mixture

8 parts propellant Frigen 12

Note: Max. pH 11

Formula D71-02

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Shaving Lotion for Use Before Electric Shaving

	<u>%W/W</u>
I Eutanol G	3.2
Isopropanol	66.8
Perfume	0.4
II Boric acid	0.2
Water	29.4
Formula No. D51-01	

Shaving Lotion for Use Before Electric Shaving

	<u>%W/W</u>
I Myritol 318	2.00
Isopropyl Myristate	3.00
Ethyl alcohol 96%	88.00
Perfume	1.00
II Lactic acid 80%	0.05
Water	5.95
Formula No. D51-02	

Shaving Lotion for Use After Shaving

	<u>%W/W</u>
I Cetiol HE	1.00
Eumulgin O5	1.00
Menthol	0.01
Ethyl alcohol 96%	50.00
Perfume	1.00
II Allantoin	0.20
Cremogen witch hazel extract	5.00
Water	41.79
Formula No. D51-03	

Shaving Lotion for Use After Shaving

	<u>%W/W</u>
I Cetiol HE	3.0
Ethyl alcohol 96%	70.0
Menthol	0.2
Camphor	0.2
Perfume	0.5
II Henkel Glycerin 86% DAB 9	5.0
Cremogen witch hazel extract	10.0
Boric acid	0.2
Water	10.9
Formula No. D51-04	

SSOURCE: Henkel KGaA: Cosmetic Model Formulae



# **Section XI**

## **Soaps and Hand Cleaners**

Ajinomoto Solid Bar AI-KK

<u>Ingredients:</u>	<u>Weight%</u>
Sodium N-Cocoyl, Tallowyl-L-Glutamate (Amisoft GS-11)	42.00
Sodium cocoylisethionate	42.00
Cetyl alcohol	7.00
Titanium dioxide	0.10
EDTA disodium salt	0.10
Deionized water	8.80

Procedure:

1. Dissolve cetyl alcohol and deionized water at 80 degrees Centigrade with stirring.
2. Add titanium dioxide and EDTA disodium salt and disperse thoroughly.
3. Add small amount of GS-11 (3g per 100g of water) to the mixture to emulsify at 80 degrees C, cool with continued stirring.
4. Add the mixture from step 3 to GS-11 and Sodium cocoylisethionate and mingle thoroughly.
5. Mill the mixture on a roller mill and then convert into a bar through an extruder.
6. Mold the bar in a stamping machine.

Ajinomoto Clear Soap with Amisoft  
Formula TP-10

<u>Ingredients:</u>	<u>Wt%</u>
Soap Material*	41.2
Amisoft HS-21	5.0
Ethyl Alcohol	17.0
Glycerin	7.0
Sugar	12.0
Water	17.8

## \*Typical Ratio of Soap Material:

Sodium Laurate	7.75 wt%
Sodium Myristate	5.66
Sodium Palmitate	23.47
Sodium Stearate	39.81
Sodium Oleate	23.31

SOURCE: Ajinomoto USA, Inc.: Suggested Formulations

**Anti-Bacterial Handsoap**  
(Formula 91-1007)

	<u>% By Weight</u>
Rhodacal A246LX	10.0
Rhodapon L-22HNC	25.0
Mirataine CBS	3.5
Cheelox 100 (Dow)	0.2
Propylene Glycol	1.0
Alkamide LE	0.5
Ottasept Extra (Ferro)	1.0
Citric Acid	Q.S. to pH 5.5-6.5
Fragrance, Dye(s), Preservative	Q.S.
Sodium Chloride	0.05-0.50
Water	58.5

**Blending Procedure:**

Charge water into mixing vessel and slowly blend in Rhodacal A246LX, Rhodapon L-22HNC, Mirataine CBS, and Cheelox 100. Mix until completely uniform. In a separate mixing vessel, combine Propylene Glycol, Alkamide LE and Ottasept Extra. With gentle heat, mix until uniform. With smooth agitation, slowly blend this mixture into main system. Once system is uniform, adjust pH to 5.5-6.5 with Citric Acid as needed and then blend in compatible Fragrance, Dye(s), and Preservative. Adjust the formulation viscosity to 7,000-10,000 cps with the judicious addition of Sodium Chloride as needed.

**Typical Formulation Properties:**

Appearance @ 25C:	Clear, Viscous Liquid
% Non Volatiles:	15-17
pH:	5.5-6.5
Viscosity @ 25C:	7,000-10,000 cps
Active Ingredient:	Chloroxylenol

**Emollient Hand Cleaner**  
(Formula 91-1006)

**"Cold Process Formula"**

	<u>% by Weight</u>
Rhodapon L-22HNC	35.0
Mirapol 550	0.5
Mirasheen 202	8.0
Fragrance, Dye(s), Preservative	Q.S.
Citric Acid	Q.S. to pH 5.5-6.5
Sodium Chloride	0.2-1.0
Water	56.0

**Blending Procedure:** Charge water into mixing vessel. With smooth agitation, slowly blend in Rhodapon L-22HNC and Mirapol 550. Mix until completely uniform. With smooth agitation, slowly blend in Mirasheen 202. Mix until uniform. Add compatible Fragrance, Dye(s), and Preservative. Adjust formulation pH to 5.5-6.5 with Citric Acid as needed. Adjust formulation viscosity to 4,000-6,000 cps (No. 4 spindle @ 10 RPM) with the judicious addition of Sodium Chloride as needed.

**Typical Formulation Properties:**

Appearance @ 25C:	Opaque/Pearlescent Liquid
pH:	5.5-6.5
% Non Volatiles:	13-15

**SOURCE:** Rhone-Poulenc Surfactants & Specialties: Formulas

**Conditioning Cleansing Bar**  
(Formula 91-1104)

This combo bar combines the cleaning and foaming of a soap bar with the mildness and hard water compatability of a synthetic detergent bar. Additionally, it incorporates the skin conditioning properties of quaternized guar. Use of this bar with its emollients, moisturizers and conditioners leaves the skin feeling soft and smooth. The bar has been specially formulated to give a non-alkaline pH to more nearly match the skin's natural pH.

	<u>% by Weight</u>
Step A:	
Geropon AS-200	76.0
80/20 Bradpride Soap Base (Original Bradford Soap Works)	7.0
Stearic Acid, Triple Pressed	Q.S.
Nadex 360 (National Starch)	0.2
Jaguar C-162	1.0
Titanium Dioxide	0.2
Step B:	
Water	4.2
Sodium Chloride	0.5
Step C:	
Fragrance, Dye(s), Preservative	Q.S.

**Blending Procedure:**

- Step A: Blend the dry components (Geropon AS-200, Soap Base, Stearic Acid, Nadex 360, Jaguar C-162, Titanium Dioxide) in a powder mixer.
- Step B: Dissolve the Sodium Chloride and any other water soluble components in the water. Add uniformly to Step A to avoid wet spots.
- Step C: Finally, add the fragrance evenly to Steps A and B.
- Step D: When the batch has been uniformly mixed, mill and/or refine until batch is homogeneous. Extrude and stamp into bars.

**Typical Formulation Properties:**

Appearance:	Opaque Bar
pH (5% dispersion):	6.5-7.0

**CTFA Identification:** Sodium Cocoyl Isethionate, Stearic Acid, Sodium Tallowate, Water, Dextrin, Sodium Cocoate and/or Sodium Palm Kernallate, Hydroxypropyl Guar Hydroxypropyltrimonium Chloride, Sodium Chloride, Titanium Dioxide, Fragrance, Preservative, Dye(s).

**SOURCE:** Rhone-Poulenc Surfactants & Specialties: Formulas

**Conditioning Hand Cleanser****Ingredients:**

	<u>%w/w</u>
Phase A:	
Tetrasodium EDTA	0.10
Water	52.65
Cocamidopropyl Amine Oxide (Tegamine Oxide WS 35)	5.00
Sodium Laureth Sulfate (30%)	25.00
Sodium Lauryl Sulfate (30%)	10.00
PEG-20 Glyceryl Isostearate (Tagat 12)	0.50
Preservatives	Q.S.
Color	Q.S.
Fragrance	Q.S.
*Sodium Lactate (and) Sodium PCA (and) Glycine (and) Fructose (and) Urea (and) Niacinamide (and) Inositol (and) Sodium Benzoate (and) Lactic Acid (Lactil)	0.25
Citric Acid (25% Solution)	to pH 6.5
Phase B:	
PEG-18 Glyceryl Oleate/Cocoate (Antil 171)	1.50
Cocamidopropyl Betaine (Tego Betaine L-7 or F)	5.00
Phase C:	
Sodium Chloride (25% Solution)	As Needed for Viscosity

**Procedure:**

1. Add the ingredients in order. Mix until uniform.
2. Adjust pH with the Citric Acid.
3. Add the PEG-18 Glyceryl Oleate/Cocoate. Mix until dispersed. Viscosity will increase.
4. Add the cocamidopropyl betaine.
5. Adjust viscosity with the salt.

Note: ALES/ALS can be substituted for the SLES/SLS

\*Optional: Plant extracts can be substituted for the Lactil.

SOURCE: Goldschmidt Chemical Corp.: Suggested Formulation

**Emollient Liquid Hand Soap**

	<u>Weight, %</u>
Ammonium Lauryl Sulfate (30%)	40.0
Mackanate LA	20.0
Mackalene 426	6.0
Mackamide CMA	2.0
Mackernium 007	1.2
Mackester EGDS	1.0
Sodium Chloride	0.8
Paragon Preservative	q.s.
Water, Dye, Fragrance qs to	100.0

**Procedure:**

1. Add the first seven components to water and heat to 70C.
2. Blend until completely homogeneous.
3. Cool to 50C. and add Paragon preservative, fragrance and dye.
4. Adjust ph to 5.5-6.5 with citric acid.
5. Cool and fill.

SOURCE: McIntyre Group Ltd.: Suggested Formulation

Cream Soap

<u>Ingredients:</u>	<u>Wt%</u>
Amiter LGS-5 (Disteareth-5 Lauroyl Glutamate)	2.0
Pyroter CPI-40 (PEG-40 Hydrogenated Castor Oil PCA Isostearate)	4.0
Emalex 6300 M-ST (PEG-150 Monostearate)	3.0
Emalex 6300 DI-ST (PEG-150 Distearate)	1.0
Ajidew N-50 (Sodium PCA)	5.0
1,3-Butylene Glycol	19.0
Cocoamide DEA	5.0
Sodium Tetradecene Sulfonate: AOS	3.0
Sodium Cocoyl Sarcosinate (30%)	2.0
Amisoft LS-11 (Sodium Lauroyl Glutamate)	36.0
Water	20.0

## Specifications:

pH: 5.0

Vis: 2500 cps

This cream soap has a pearlescent appearance, soft touch and good foaming characteristics.

Formula H-046

Cream Soap

<u>Ingredients/Trade Name:</u>	<u>% Weight</u>
Sodium Lauryl Glutamate/Amisoft LS-11	15.00
Sodium Stearate	17.00
Sodium Laurate	7.00
Glycerin	24.00
Polyoxyethylene Sorbitan Monolaurate (20 E.O.)	5.00
Water	qs

Crystallization Temp: 46 degrees Centigrade

pH: 8.6 (5% aq. solution, 25 degrees Centigrade)

Formula AS-354-G

SOURCE: Ajinomoto USA, Inc.: Suggested Formulations

**Cream Soap**  
**(No. H-046)**

<u>Ingredients:</u>	<u>Wt%</u>
Amiter LGS-5 (Disteareth-5 Lauroyl Glutamate)	2.0
Pyroter CPI-40 (PEG-40 Hydrogenated Castor Oil PCA Isostearate)	4.0
Emalex 6300 M-ST (PEG-150 Monostearate)	3.0
Emalex 6300 DI-ST (PEG-150 Distearate)	1.0
Ajidew N-50 (Sodium PCA)	5.0
1,3-Butyleneglycol	19.0
Cocamide DEA	5.0
Sodium Tetradecene Sulfonate: AOS	3.0
Sodium Cocoyl Sarcosinate (30%)	2.0
Amisoft LS-11 (Sodium Lauroyl Glutamate)	36.0
Water	20.0

**Specifications:**

pH: 5.0

Viscosity: 2500 cps

This cream soap has a pearlescent appearance, soft touch and good foaming characteristics.

**Bar Soap**

<u>Ingredients:</u>	<u>Wt%</u>
Amisoft GS-11 (Sodium Hydrogenated Tallow Glutamate & Sodium Cocoyl Glutamate)	84.0
Water	8.8
Cetyl Alcohol	7.0
Titanium Dioxide	0.1
Disodium EDTA	0.1

**Cream Soap**

<u>Ingredients/Trade Name:</u>	<u>% Weight</u>
Sodium Lauryl Glutamate/Amisoft LS-11	15.00
Sodium Stearate	17.00
Sodium Laurate	7.00
Glycerin	24.00
Polyoxyethylene Sorbitan Monolaurate (20 E.O.)	5.00
Water	qs

Crystallization Temp 46, degrees Centigrade

pH: 8.6 (5% aq. solution, 25 degrees Centigrade)

Formula AS-354-G

SOURCE: Ajinomoto USA, Inc.: Suggested Formulations

Emollient Hand CleanserIngredients:

	<u>%w/w</u>
Phase A:	
Water	47.00
Tetrasodium EDTA	0.10
Sodium Laureth Sulfate (30%)	30.00
Sodium Lauryl Sulfate (30%)	10.00
PEG-7 Glyceryl Cocoate (Tegosoft GC)	1.00
*Sodium Lactate (and) Sodium PCA (and) Glycine (and) Fructose (and) Urea (and) Niacinamide (and) Inositol (and) Sodium Benzoate (and) Lactic Acid (Lactil)	0.25
PEG-30 Glyceryl Laurate	0.25
Preservatives	Q.S.
Color	Q.S.
Fragrance	Q.S.
Citric Acid (25% Solution)	to pH 6.5

## Phase B:

PEG-18 Glyceryl Oleate/Cocoate (Antil 171)	1.40
Cocamidopropyl Betaine (and) Glyceryl Laurate (Tego Betaine HS)	10.00

## Phase C:

Sodium Chloride (25% Solution)	As Needed for Viscosity
--------------------------------	-------------------------

Procedure:

1. Add the ingredients in order. Mix until uniform.
2. Adjust pH with the Citric Acid.
3. Add the PEG-18 Glyceryl Oleate/Cocoate. Mix until dispersed. Viscosity will increase.
4. Add the Tego Betaine HS.
5. Adjust viscosity with the salt.

Note: ALES/ALS can be substituted for the SLES/SLS.

\*Optional - plant extracts can be substituted for the Lactil.

SOURCE: Goldschmidt Chemical Corp.; Suggested Formulation

Clear Emollient Hand Soap

	<u>Weight, %</u>
TEA Lauryl Sulfate (40%)	35.0
Mackam 35HP	10.0
Mackalene 426	6.0
Mackstat DM	q.s.
Water, Dye, Fragrance qs to	100.0

Procedure:

1. Add components to water and heat to 40C.
2. Blend until clear.
3. Adjust pH to 5.0-6.0 with citric acid.
4. Cool and fill.

SOURCE: McIntyre Group Ltd.; Suggested Formulation



Liquid Soap  
Clear, 11.2% active ingredient

Recipe:

A	Genapol LRO liquid	35.00%
	Sodium Laureth Sulfate	
B	Perfume	0.20%
	Cetiol HE	1.00%
	PEG-7 Glyceryl Cocoate	
	Water	55.30%
	Dyestuff solution	q.s.
	Preservative	q.s.
	Genapol L-3	2.00%
	Laureth-3	
	Genagen CAB	6.00%
	Cocamidopropyl Betaine	
C	Sodium chloride	0.50%

Procedure:

I One after another the components of B are added to A.

II If necessary adjust the pH.

III Finally adjust the viscosity with C.

Formula A II/1027

Liquid Soap  
With pearl lustre effect, 14.6% active ingredient

Recipe:

A	Hostapon SCID	4.00%
	Sodium Cocoyl Isethionate	
B	Water	53.90%
C	Genapol ZRO liquid	30.00%
	Sodium Laureth Sulfate	
	Perfume	0.30%
	Genapol PGL	4.00%
	Glycol Distearate (and) Cocamide MEA and PPG-4 Deceth-4	
	Dyestuff solution	q.s.
	Preservative	q.s.
	Genagen CAB	6.00%
	Cocamidopropyl Betaine	

D	Sodium chloride	1.80%
---	-----------------	-------

Procedure:

I Dissolve A in B at 60C.

II One after another the components of C are added to I at 35C.

III If necessary adjust the pH.

IV Finally adjust the viscosity with D.

Formula A II/1033

SOURCE: Hoechst: Guide Formulations for Cosmetics & Toiletries

Liquid Soap

Clear, slightly yellow gel.

Material/CTFA-Index:

Hoe S 3267/Cocamidopropyl Betaine	16.00%
Water	41.20
Water	37.30
Genagen CA 050	2.00
Sodium Chloride	2.00
Belsil DMC 6031/Dimethicone Copolyol	0.50
Preservatives, pigments, fragrances	q.s.

Dissolve HOE S 3267 in water, mix in the remaining components.

Temperature stability: at 45C over 10 weeks.

Formulation 230 AH

Liquid Soap

Clear, high-viscosity gel with good foaming effect.

Material/CTFA-Index:

A: Water	77.00%
Tylose H 4000 P/Hydroxyethylcellulose	1.00
B: Wacker-Belsil DMC 6038/Dimethicone Copolyol	3.00
C: Comperlan KD/Cocamide DEA	3.00
Texapon NA/Ammonium Laureth Sulfate	16.00
Preservatives, pigments, fragrances	q.s.

Mix A, add B, stir C into AB

Formula 1067 AH

SOURCE: Wacker Silicone: Suggested Formulations

Liquid Waterless Hand Cleaner

<u>Ingredients:</u>	<u>% by Weight</u>
A. Veegum	2.00
Water	73.00
B. Glycerin	4.00
Tergitol NP-10	3.00
AMP-Regular	0.50
C. Deodorized kerosene	10.00
Oleic acid	1.50
Arlacel 186	5.00
Clearlan	1.00
Preservative	q.s.

**Procedure:**

Slowly add Veegum to the water while agitating at maximum available shear. Continue mixing until smooth. Add B to A and heat to 50C. Add C to A/B. Mix until uniform. Add desired preservative.

Consistency: Pourable liquid

Suggested Packaging: Pump dispenser

**Comments:**

Veegum stabilizes and thickens this liquid emulsion. In this formulation, glycerin serves as a humectant while the lanolin helps prevent defatting of the skin.

Formulation PF-0125 suggested by R.T. Vanderbilt Co., Inc.

Liquid Soap

<u>Ingredients:</u>	<u>% by Weight</u>
Ammonium laureth sulfate, 60%	24.00
Cocamidopropyl betaine	6.00
Stearamidopropyl dimethylamine	1.50
Sodium chloride	1.30
Glycol distearate	1.00
Citric acid	0.25
Methylparaben	0.15
Propylparaben	0.05
Bronopol	0.05
Water, color, fragrance	q.s. to 100.00

**Procedure:**

Heat water to 70-75C. Add all ingredients except fragrance and Bronopol. Mix until homogeneous. Cool and add Bronopol and fragrance and fill.

Formulation PF-0130 from Cosmetics and Toiletries, Vol 101, July 1986

SOURCE: Angus Chemical Co.: Angus Product Formulary

**Lotion Hand Cleaner with Abrasive and Ritavena 5**

<b><u>Ingredients:</u></b>	<b><u>%W/W</u></b>
Part A:	
1. Distilled Water	39.55
2. Bio-Terge AS-40	25.00
3. Methylparaben	0.15
Part B:	
4. Ritasynt IP	4.00
5. Pationic ISL	3.00
6. Ritapeg 150 DS	1.00
Part C:	
7. Ritavena 5	2.00
8. Distilled Water (100C)	20.00
Part D:	
9. Walnut Shells (AD-7B Type from Agrashell, Inc.)	5.00
Part E:	
10. NaCl (25% Solution)	QS
11. Kathon CG	0.10
12. Triethanolamine (50% Solution)	0.15
13. Perfume	0.05

**Compounding Procedure:**

Heat Parts A and B to 165F. Combine with impeller agitation. Premix Part C in a blender for 2 minutes. Add Parts C and D to AB mixture. Mix until uniform. Cool to 120F. Add Part E. Adjust pH to 6.0 with Triethanolamine (50% Solution). Adjust viscosity with NaCl (25% Solution).

Formula 114-25

**Lotion Hand Cleaner with Abrasive and Ritavena 5**

<b><u>Ingredients:</u></b>	<b><u>%W/W</u></b>
Part A:	
1. Distilled Water	40.10
2. Bio-Terge AS-40	25.00
3. Methylparaben	0.15
Part B:	
4. Ritasynt IP	4.00
5. Pationic ISL	3.00
6. Ritapeg 150 DS	0.50
Part C:	
7. Ritavena 5	2.00
8. Distilled Water (100C)	20.00
Part D:	
9. Walnut Shells (AD-7B Type from Agrashell, Inc.)	5.00
Part E:	
10. NaCl (25% Solution)	QS
11. Kathon CG	0.05
12. Triethanolamine (50% Solution)	0.15
13. Perfume	0.05

**Compounding Procedure:**

Heat Parts A and B to 165F. Combine. Premix Part C in a blender for 2 minutes. Add Parts C and D to AB mixture. Mix until uniform. Cool to 120F. Add Part E. Adjust pH to 6.0 with Triethanolamine (50% Solution). Adjust viscosity with NaCl (25% Solution).

Formula 114-35

SOURCE: R.I.T.A. Corp.: RITAVENA 5 Suggested Formulations

**Shebu Bar Soap**

A Shebu beauty bar which combats dryness and leaves a luxurious after-feel.

<u>Ingredients:</u>	<u>%W/W</u>	<u>Function</u>
Base: Palm Coco		Soap Base
Color: Yellow	q.s.	Color
Fragrance: Alpine Floralistic	0.75%	Odor
Addit: Shebu Refined (Shea Butter)	0.75%	Emolliency
Pationic 138C (Sodium Lauroyl Lactylate)	0.50%	Mildness
Pationic ISL (Sodium Isostearoyl Lactylate)	0.50%	Moisturization
TiO <sub>2</sub>	0.50%	Opacifier
Ref. No.: 117-65A		

**Shebu Glycerine Bar Soap**

For sensitive skin with pure natural glycerine and Shebu. Leaves your skin soft and clean without feeling tight or dry.

<u>Ingredients:</u>	<u>%W/W</u>	<u>Function</u>
Base: Veg. Translucent		Soap Base
Color: Gold	q.s.	Color
Fragrance: Alpine Floralistic	100%	Odor
Addit: Pationic 138C (Sodium Lauroyl Lactylate)	0.50%	Mildness
Pationic ISL (Sodium Isostearoyl Lactylate)	0.50%	Moisturization
Shebu WS (PEG-50 Shea Butter)	1.00%	Emolliency
Ref. No.: 117-65B		

**Soap Base Beauty Bar**

A high foaming beauty bar which combats dryness and leaves a luxurious after-feel.

<u>Ingredients:</u>	<u>%W/W</u>	<u>Function</u>
1. Soap Base 80/20 Tallow/Coco	94.00	Cleaning, Lather
2. Versenex 80 (Pentasodium Pentetate)	q.s.	Caking
3. Turpinal 4NL (Tetrasodium Etidronate)	q.s.	Caking
4. Fragrance Oil D-79-531	1.00	Odor
5. Rita PEO-1 (PEG-5M)	1.50	Slip, Feel
6. Pationic ISL (Na Isostearoyl Lactylate)	3.00	Mildness, Lather
7. Titanium Dioxide	0.50	Opacity

**Compounding Procedure:**

Pre-mix fragrance into Pationic ISL. Combine other materials until uniform. Add the Pationic ISL/fragrance mixture and continue blending until uniform. pH: 10.0-10.5  
Ref. No.: H-89-P-10

SOURCE: R.I.T.A. Corp.: Shower/Bath Care

Shebu Bar Soap

A Shebu beauty bar which combats dryness and leaves a luxurious after-feel.

<u>Ingredients:</u>	<u>%W/W</u>	<u>Function</u>
Base: Palm Coco		Soap Base
Color: Yellow	q.s.	Color
Fragrance: Alpine Floralistic	0.75	Odor
Addit: Shebu Refined (Shea Butter)	0.75	Emolliency
Patonic 138C (Sodium Lauroyl Lactylate)	0.50	Mildness
Patonic ISL (Sodium Isostearoyl Lactylate)	0.50	Moisturization
TiO <sub>2</sub>	0.50	Opacifier

Ref. No. 117-65A

Shebu Glycerine Bar Soap

For sensitive skin with pure natural glycerine and Shebu. Leaves your skin soft and clean without feeling tight or dry.

<u>Ingredients:</u>	<u>%W/W</u>	<u>Function</u>
Base: Veg. Translucent		Soap Base
Color: Gold	q.s.	Color
Fragrance: Alpine Floralistic	100.00	Odor
Addit: Patonic 138C (Sodium Lauroyl Lactylate)	0.50	Mildness
Patonic ISL (Sodium Isostearoyl Lactylate)	0.50	Moisturization
Shebu WS (PEG-50 Shea Butter)	1.00	Emolliency

Ref. No. 117-65B

SOURCE: R.I.T.A. Corp.: Bath & Shower Care

**Synthetic Detergent (SYNDET) Cleansing Bar**

This mild, synthetic detergent bar gently cleans and provides copious, luxurious lather, leaving a smooth after-feel on the skin. Veegum F, micronized Magnesium Aluminum Silicate, reduces softening of the bar in the soap dish after use. Vanseal LS, lauroyl sarcosine, when melted, acts as a solvent for the stearic acid and sodium cocoyl isethionate. Vanlube PCX, BHT is used as an antioxidant.

<u>Ingredient:</u>	<u>% by Weight*</u>
A: Vanseal LS, Lauroyl Sarcosine	32.63
Stearic Acid	32.64
Sodium Cocoyl Isethionate	32.63
B: Veegum F, Magnesium Aluminum Silicate	2.00
Vanlube PCX, BHT	0.10
Sodium Hydroxide Solution to pH 6.5	q.s.
Preservative, Dye, Fragrance	q.s.

\*As Received Basis

**Mixing Procedure:**

Heat Vanseal LS to 50C. Add stearic acid and stir gently until the mixture is clear. Add sodium cocoyl isethionate and mix until smooth and uniform. Maintain the temperature between 50 and 60C. Add part B ingredients in the order shown, mixing each until smooth and uniform. Pour the mixture into warm (50C) soap molds and cool to room temperature.

SOURCE; R.T. Vanderbilt Co., Inc.: Formula No. 455

**Cream Hand Cleanser**

	<u>Weight, %</u>
Mackanate LO-Special	78.0
Glycerine	5.0
Mackamide PKM	4.0
Mackernium 007	2.0
Mackstat DM	q.s.
Water, Fragrance qs to	100.0

**Procedure:**

1. Add Mackamide PKM and glycerine to Mackanate LO-Special and heat to 70C.
2. Blend until homogeneous.
3. Dissolve Mackernium 007 in remaining water and slowly add to product.
4. Blend until completely homogeneous.
5. Cool to 50C with mild agitation.
6. Add Mackstat DM, fragrance and cool with continuous agitation.

SOURCE: McIntyre Group Ltd.: Suggested Formulation

**Waterless Hand Cleaner**

<u>Ingredient:</u>	<u>Weight%</u>	<u>Function</u>
<b>Part A:</b>		
Deionized Water	62.45	Diluent
Tween 80 (1)	0.40	Surfactant
Glycerin	4.00	Humectant
Disodium EDTA	0.05	Chelating Agent
<b>Part B:</b>		
Odorless Mineral Spirits	30.00	Solvent
Finsolv TN (2)	1.00	Emollient
Acetulan (3)	0.50	Emollient
Pemulen TR-2 (4)	0.30	Emulsifier
Carbopol 954 (5)	0.20	Thickener
<b>Part C:</b>		
Triethanolamine, 99%	0.40	Neutralizing Agent
<b>Part D:</b>		
Germaben IIE (6)	0.70	Preservative
(1) Polysorbate 80 (ICI Americas)		
(2) C12-C15 Alcohols Benzoate (Finetex)		
(3) Cetyl Acetate (and) Acetylated Lanolin Alcohol (Amerchol)		
(4) Acrylates/C10-C30 Alkyl Acrylate Crosspolymer (BFGoodrich)		
(5) Carbomer (BFGoodrich)		
(6) Propylene Glycol (and) Diazolidinyl Urea (and) Methyl Paraben (and) Propyl Paraben (Sutton Labs)		

**Preparation Procedure:**

- 1) Prepare Part A in a vessel which will contain the entire formulation.
- 2) Prepare Part B in a separate vessel. Pemulen and Carbopol should be slurried in this phase.
- 3) Add Part B to the Part A vessel. Mix for 15-20 minutes.
- 4) Add Part C and mix vigorously to produce a smooth product.
- 5) Mix Part D into emulsion. Cease agitation and fill containers.

**SOURCE:** BF Goodrich Co.: Formula P0002



## **Section XII**

# **Sun Care Products**

After Sun Lotion

White creamy lotion. Easily spread.

Material/CTFA-Index:

A: Mineral oil, low viscosity	5.00%
Stearic Acid	5.00
Cetyl Alcohol	1.50
B: Water	67.20
Allantoin/5-Ureido-hydantoin	0.50
Triethanolamine	0.80
C: Propylene Glycol	3.00
Belsil PDM 20/Phenyl Dimethicone	2.00
D: Belsil CM 1000/Cyclomethicone(a.) Dimethiconol	15.00
Preservatives, perfume, pigments	q.s.

Heat A and B to 65C. Add A to B with stirring. Add C and stir until cool, add D at approx. 30-40C.

Temperature stability: at 45C more than 10 weeks.

Formulation 606 AH

Sun Tan Cream

Soft, white cream, well absorbed.

Material/CTFA-Index:

A: Crodawachs GP 200/Stearyl Alcohol(a.) PEG Stearate	3.80%
Teginacid/Glyceryl Stearate(a.) Ceteareth-20	5.00
Belsil PDM 1000/Phenyl Dimethicone	3.50
Eusolex 6300	2.50
Eusolex 8020	1.50
B: Water	73.70
C: Belsil CM 1000/Cyclomethicone(a.) Dimethiconol	10.00
Preservatives, perfumes, pigments	q.s.

Heat A and B to 70C. Stir into B and add C.

Temperature stability: 3 weeks at 45C.

Formulation 578 AH

Sun Tan Oil

Colourless, clear, low viscosity

Material/CTFA-Index:

A: Belsil CM 025/Cyclomethicone	10.00%
Isopropyl Myristate	10.00
Mineral oil	77.00
Parsol MCX/Octyl Methoxycinnamate	3.00
Preservatives, pigments, fragrances	q.s.

Mix A, add Parsol MCX and mix.

Temperature stability: at 45C over 10 weeks.

Formulation 197 AH

SOURCE: Wacker Silicone: Suggested Formulations

**After-Sun-Milk****Recipe:**

A	Hostaphat KL 340 N	1.50%
	Trilaureth-4 Phosphate	
	Hostacerin DGS	4.00%
	Polyglyceryl-2 PEG-4 Stearate	
	Mineral oil, high viscosity	3.00%
	Isopropyl palmitate	3.00%
	Cetiol SN	3.00%
	Cetearyl Isononanoate	
	Jojoba oil	3.00%
	Walnut oil	3.00%
	D-Panthenol	1.00%
	B-Carotin	q.s.
	Antioxidant	q.s.
B	Carbopol 980	0.40%
	Carbomer	
C	Allantoin	0.20%
	Aquamollin BC pdr.h.c.	0.10%
	Ethylenediamine Tetraacetic Acid-Sodium Salt	
	Citric acid (10% in water)	0.25%
	Glycerine	3.00%
	NaOH (10% in water)	1.60%
	Water	67.15%
	Preservative	q.s.
D	Collagen KD	3.00%
	Ethanol	1.50%
	Perfume	0.30%

**Procedure:**

- I Melt A at 70C, then add B.
- II Heat C to 70C.
- III Stir II into I.
- IV Stir until cool.
- V At 35C add the components of D to IV.
- VI Homogenize if necessary.

**SOURCE:** Hoechst: Guide Formulations for Cosmetics & Toiletries:  
Formula A VI/3016

After Sun Milk

<u>Ingredients:</u>	<u>Parts by Weight</u>
Part A-Oil Phase:	
Egg yolk extract (Tensami 8/09)	100.00
Refined avocado oil	20.00
Calendula extract	0.10
Tocopherol	0.10
Part B-Water Phase:	
Deionized water	SQF1000
Lecithin-xanthan gum (Tensami 1/05)	7.00
Calendula extract	20.00
270 Solarium HS	30.00
Amigel in aqueous solution at 2%	250.00
Part C:	
Isopropyl myristate	30.00
Carbomer 940 (Carbopol 940)	2.00
Part D:	
Bronopol	0.60
Myacide SP	0.50
Part E:	
Perfume	2.00
Procedure:	

Prepare A and B phases (do not heat). Add phase A to phase B. While agitating, add phase C and then the ingredients of phase D one by one. Add phase E. Balance the pH around 6.5-7.0. Formulation PF-0275E suggested in Soap, Perfumery, Cosmetics; October, 1993 issue.

Moisturizing Hydrogel with B-Glucan

This product is used after exposure to the sun to regain the moisture lost by the skin. Healing and moisturizing are two of its unique properties which B-Glucan has on inflamed skin (sunburn). Bees milk places a protective barrier over the skin to prevent moisture loss.

<u>Ingredients:</u>	<u>% by Weight</u>
A. Carbomer 940, 2%	54.00
Glycosome	3.70
APT	3.50
Ginkgo extract	2.00
Aloe vera gel	5.00
Polyquaternary spearmint extract	4.00
Firming liposome	3.00
Phenonip	0.70
Tris Amino	3.20
B. Deionized water	13.40
Methylparaben	0.40
Disodium EDTA	0.08
C. B-Glucan, 70%	0.02
D. Bees milk	7.00
Procedure:	

Add A under agitation. Heat B to 80C. At 80C, add C; mix well. Cool BC to 30C, add to A under agitation. Slowly add D to ABC; mixing until homogeneous.

Formulation PF-0326 suggested by Koster Keunen

SOURCE: Angus Chemical Co.; Angus Product Formulary

**Dry Touch Physical Sunscreen**

This formula is not an emulsion but rather a suspension of several water-insoluble ingredients in water. Veegum Plus prevents these ingredients from settling and/or separating. The physical sunscreen used is micronized Titanium Dioxide. This formula also contains liposomes with a payload of the well-known moisturizing agents Sodium PCA and amino acids. A silicone oil dispersion is also included to enhance application properties. The formula contains no emulsifying agents.

<u>Ingredient:</u>	<u>% by wt.*</u>
A: Deionized Water	59.70
Veegum Plus (Magnesium Aluminum Silicate (and)	
Cellulose Gum)	1.50
Rhodigel (Xanthan Gum)	0.20
B: Glycerin (and) Titanium Dioxide**	28.60
C: Deionized Water (and) Phenyl Trimethicone (and)	
Cyclomethicone (and) Dimethiconol (and) Phospho-	
lipids (and) Phenoxyethanol (and) Methylparaben	
(and) Carbomer (and) Triethanolamine (and) Ethyl-	
paraben (and) Propylparaben (and) Butylparaben***	5.00
D: Preservative	q.s.
E: Deionized Water (and) Sodium PCA (and) Phospholipids	
(and) Phenoxyethanol (and) Tocopheryl Acetate (and)	
Xanthan Gum (and) Arginine (and) Lysine (and) Glycine	
(and) Methylparaben (and) Proline (and) Ethylparaben	
(and) Propylparaben (and) Butylparaben****	5.00

\*As Received Basis

\*\*TiO<sub>2</sub> Sperse GLY

\*\*\*Satin Finish

\*\*\*\*Moisturizing Liposomes

**Mixing Procedure:**

Weigh and dry blend the Veegum Plus and Rhodigel. Add the blend to the Part A water at room temperature, mixing with a propeller mixer at 1800 rpm. Continue mixing for 30 minutes. Add Part B and mix 10 minutes at 1800 rpm. Add Parts C and D to the batch in the order shown. Mix Part C for 10 minutes at 1800 rpm before adding Part D. Mix Part D 5 minutes at the same speed. Slow the mixer to 500 rpm and add Part E. Mix 5 minutes and package.

**Product Characteristics:**

Viscosity: 1300-1700 cps (Brookfield Model LVT, #3 @ 60 rpm)  
pH: 7.5-7.8

SOURCE: R.T. Vanderbilt Co., Inc.: Formula No. 484

High SPF Sunscreen Cream

<u>Ingredient:</u>	<u>Weight%</u>	<u>Function</u>
<b>Part A:</b>		
Deionized Water	73.37	Diluent
Glycerin	2.50	Humectant
Disodium EDTA	0.03	Chelating Agent
<b>Part B:</b>		
Octyl Methoxy Cinnamate	7.50	UVB Absorber
Octyl Salicylate	5.00	UVB Absorber
Oxybenzone	5.00	UVA Absorber
C12-C15 Alcohols Benzoate (1)	4.00	Emollient/Solvent
Sorbitan Oleate	0.30	Surfactant
Pemulen TR-1 (2)	0.30	Emulsifier
Carbopol 980 (3)	0.50	Thickener
<b>Part C:</b>		
Propylene Glycol (and) Diazolidinyl	0.80	Preservative
Urea (and) Methyl Paraben (and)		
Propyl Paraben (4)		
<b>Part D:</b>		
Triethanolamine (99%)	0.70	Neutralizing Agent

- (1) Finsolv TN (Finetex)  
 (2) Acrylates/C10-C30 Alkyl Acrylate Crosspolymer (BFGoodrich)  
 (3) Carbomer (BFGoodrich)  
 (4) Germaben IIE (Sutton)

**Preparation:**

1. Combine Part A ingredients. Mix until homogeneous.
2. Combine first five Part B ingredients in a separate vessel. Mix until oxybenzone has dissolved. Warming will hasten dissolution.
3. Add Pemulen TR-1 and Carbopol 980 to Part B vessel. Mix to break-up any soft agglomerates of powder.
4. With moderate agitation, add Part B to Part A. Mix for 30-40 minutes or until a smooth, non-grainy dispersion is apparent. Add Part C.
5. Add Part D and mix vigorously until a smooth, lustrous product is obtained.

Formula 700-213-8C

SOURCE: BFGoodrich Co.: Waterproof Sunscreen Emulsions

Low Solids Highly Emollient Suntan Lotion

Lipid layer related attributes from Ritaderm and low viscosity rheology from Acritamer gives a lubricious, low solids, broad spectrum UV sunscreen.

<u>Ingredients:</u>	<u>%W/W</u>	<u>Function</u>
1. Distilled/Deionized Water	76.10	----
2. Acritamer 941 (Carbomer 941)	0.10	Rheology, Stabilizer
3. Rita IPM (Isopropyl Myristate)	5.00	Emollient
4. Ritaderm (R.I.T.A. Blend)	5.00	Moisturizing
5. Ritalan (Lanolin Oil)	1.00	Emollient
6. Ritacetyl (Acetylated Lanolin)	2.50	Emollient
7. Rita CA (Cetyl Alcohol)	0.70	Emulsifier
8. Rita GMS (Glyceryl Monostearate)	1.50	Emulsifier
9. Rita Stearic Acid	2.00	Emulsifier
10. Mineral Oil	2.00	Emollient
11. Octyl Dimethyl PABA	2.50	Sunscreen
12. Triethanolamine (50%)	1.60	Neutralizer
13. Fragrance	q.s.	Odor

Compounding Procedure:

Disperse 2 into 1 and hydrate 15 minutes. Heat to 165F. Separately combine items 3-11 and heat to 165F. Mix until uniform. Combine phases with mixing. Neutralize with 12. Cool with mixing to 120F. Add preservative and fragrance. Cool and package.

Ref. No. 118-13

Sun CareDIN Standard Reference(USFDA Tentative Final Monograph)

Reference standard used in FDA Monograph as standard.

<u>Ingredients:</u>	<u>%W/W</u>	<u>Function</u>
1. Distilled/Deionized Water	83.90	----
2. Acritamer 934 (Carbomer 934)	0.10	Stabilizer, Rheology
3. Glycerine	3.40	Emollient
4. Methylparaben	0.10	Preservative
5. Propylene Glycol	1.00	Emollient
6. Mineral Oil	5.00	Emollient
7. Rita Stearic Acid	1.50	Emulsifier
8. Rita Cetearyl Alcohol	0.40	Emulsifier
9. Propylparaben	0.10	Preservative
10. P-Methoxy-Cinnamic Acid-2-Ethyl-hexyl Ester	2.70	Sunscreen
11. Triethanolamine (99% Soln.)	1.80	Neutralizer

Compounding Procedure:

Disperse 2 into 1 and hydrate 15 minutes with mixing. Add 3-5. Heat to 165F. Separately combine 6-10 and heat to 165F. Mix well. Combine into aqueous phase. Neutralize with mixing and cool. Ref. No. 118-66

SOURCE: R.I.T.A. Corp.: Sun Care Manual

**Nourishing UVB Gel Sunscreen**

Basic gelled formulation with aqueous UVB sunscreens. Skin nourishment and anti-irritancy.

<u>Ingredients:</u>	<u>%W/W</u>	<u>Function</u>
1. Acritamer 940 (Carbomer 940)	1.00	Gelling Agent
2. Distilled/Deionized Water	74.90	----
3. Ritapan D (d-Panthenol)	0.20	Conditioner
4. DEA Methoxy Cinnamate	3.00	Sunscreen
5. SD Alcohol (Ethanol @ 95%)	10.00	Solvent/ Solubilizer
6. Ritachol (Mineral Oil and Lanolin Alcohol)	8.00	Emollient
7. Pationic ISL (Sodium Isostearoyl Lactylate)	0.50	Solubilizer
8. Preservative	q.s.	Preservative
9. Fragrance	q.s.	Odor
10. NaOH (18% Soln.)	2.40	Neutralizer

**Compounding Procedure:**

Prepare Carbomer gel by dispersing item 1 into item 2 with agitation. Neutralize with item 10. Separately combine items 3, 4 and 5 and mix until dissolved and uniform. Add to Carbomer gel with low sheer mixing, then add item 6. Solubilize fragrance (9) with (7), add to Carbomer gel. Preserve and package. Ref. No. 118-152

**Bain de Soleil Type Orange Gelee'**

Broad spectrum UV protection in a non-greasy waterproof gel type formula based on Ritaplast. Product has high body gloss.

<u>Ingredients:</u>	<u>%W/W</u>	<u>Function</u>
1. Ritaplast - 50W	68.00	Film Former
2. Rita IPM (Isopropyl Myristate)	28.00	Emollient
3. Propylparaben	0.08	Preservative
4. Menthyl Anthranilate	2.92	Sunscreen
5. Ritaphenone-3 (Benzophenone-3)	1.00	Sunscreen

**Compounding Procedure:**

Dissolve item 3 into a portion of item 1. Dilute item 2 into remaining item 1. Add likewise items 4 and 5 with mild stirring. Add blend 3/1, until uniform, and package. Ref. No. 118-146

SOURCE: R.I.T.A. Corp.: Sun Care Manual



**O/W-Sun-Screen-Milk**  
**Manufacturing at room temperature**

**Recipe:**

A	Hostaphat KL 340 N	3.00%
	Trilaureth-4 Phosphate	
	Mineral oil, high viscosity	10.00%
	Isopropyl palmitate	5.00%
B	Neo-Heliopan E 1000	8.50%
	Isoamyl p-Methoxycinnamate	
	Neo-Heliopan BB	8.50%
	Benzophenone-3	
C	Carbopol 980	0.50%
	Carbomer	
D	Glycerine	3.00%
	NaOH (10% in water)	1.65%
	Water	66.65%
	Preservative	q.s.
E	Perfume	0.30%

**Procedure:**

I Add the solution of B to A, then add C.

II Stir E into I, then add E.

III Homogenize if necessary.

Formula A VI/7007

**O/W-Sun-Screen-Milk**

**Recipe:**

A	Hostacerin DGL	1.00%
	Polyglyceryl-2 PEG-10 Laurate	
	Hostacerin DGS	4.00%
	Polyglyceryl-2 PEG-4 Stearate	
	Mineral oil, high viscosity	6.00%
	Avocado oil	1.00%
	Neo-Heliopan E 1000	9.00%
	Isoamyl p-Methoxycinnamate	
	Neo-Heliopan BB	1.00%
	Benzophenone-3	
	Antioxydant	q.s.
B	PNC 400	0.30%
	Polyacrylic Acid-Sodium Salt	
C	Aquamollin BC pdr.h.c.	0.10%
	Ethylene Tetraacetic Acid-Sodium Salt	
	Citric acid (10% in water)	0.25%
	Water	77.05%
	Preservative	q.s.
D	Perfume	0.30%

**Procedure:**

I Melt A at 70C, then add B. II Heat C to 70C.

III Stir II into I. IV Stir until cool.

V At 35C add D to IV. VI Homogenize if necessary.

Formula A VI/7200

SOURCE: Hoechst: Guide Formulations for Cosmetics &amp; Toiletries

Sprayable Sunscreen

This light sunscreen applies quickly and spreads easily. It gives an approximate waterproof SPF of 15.

<u>Ingredient (CTFA):</u>	<u>Weight%</u>	<u>Function</u>
<b>Part A:</b>		
Deionized Water	79.20	Diluent
Glycerin	3.00	Humectant
Triethanolamine, 99%	0.12	Neutralizing Agent
<b>Part B:</b>		
Octyl Methoxy Cinnamate	7.00	UVB Absorber
Octyl Salicylate	3.00	UVB Absorber
Oxybenzone	2.00	UVA Absorber
C12-15 Alcohols Benzoate (1)	4.00	Emollient/Solvent
Oleth-10 (2)	0.08	P.S. Reduction
Sorbitan Oleate (3)	0.05	P.S. Reduction
Dimethicone, 100 cs.	0.50	Lubricant
Pemulen TR-2 (4)	0.15	Emulsifier/Stabilizer
<b>Part C:</b>		
Propylene Glycol (and) Diazolidinyl Urea (and) Methylparaben (and) Propylparaben (5)	0.80	Preservative
Disodium EDTA	0.10	Chelating Agent/Viscosity Adjustment

- (1) Finsolv TN (Finetex)  
 (2) Procol OA-10 (Protameen Chemicals), Brij 96 (ICI)  
 (3) Protachem SMO (Protameen Chemicals), Span 80 (ICI)  
 (4) Acrylates/C10-30 Alkyl Acrylate Crosspolymer (BFGoodrich)  
 (5) Germaben IIE (Sutton Laboratories)

**Preparation:**

1. Combine Part A ingredients in a vessel which will contain the entire formulation.
2. In a separate vessel, combine all Part B ingredients except dimethicone and Pemulen. Heat to 45-50C to hasten dissolution of oxybenzone. Discontinue heating and add Pemulen. Mix to obtain a smooth dispersion. Add dimethicone.
3. Add Part B to Part A with rapid agitation. Continue mixing to obtain a smooth emulsion.
4. Add Part C. Disodium EDTA should be added incrementally such that a Brookfield viscosity of 500-1000 cps is achieved (Model RVT @ 20 RPM, #2 spindle).

Sprayer: Calmar Mark II

SOURCE: BF Goodrich Co.: Formula P0012

**Sprayable Sunscreen (SPF8)**

<u>Ingredient:</u>	<u>Weight%</u>	<u>Function</u>
<b>Part A:</b>		
Deionized Water	84.20	Diluent
Glycerin	2.00	Humectant
Hydrogenated Starch Hydrolysate (70% Solution)	1.50	Humectant
<b>Part B:</b>		
Octyl Methoxy Cinnamate	4.50	UVB Absorber
Menthyl Anthranilate (1)	3.50	UVA Absorber
C12-C15 Alcohols Benzoate (2)	3.00	Emollient
Pemulen TR-2 (3)	0.15	Emulsifier
Sorbitan Oleate	0.10	Surfactant
<b>Part C:</b>		
Triethanolamine (99%)	0.12	Neutralizing Agent
<b>Part D:</b>		
Propylene Glycol (and) Diazolidinyl Urea (and) Methyl Paraben (and) Propyl Paraben (4)	0.90	Preservative
Disodium EDTA	0.03	Chelating Agent
(1) Sunarome UVA (Felton)		
(2) Finsolv TN (Finetex)		
(3) Acrylates/C10-C30 Alkyl Acrylate Crosspolymer (BF Goodrich)		
(4) Germaben IIE (Sutton)		

**Preparation:**

1. Combine Part A ingredients. Mix until homogeneous.
2. Combine Part B ingredients in a separate vessel. Mix well to ensure blending of oils and break-up of soft powder lumps.
3. With mixing, add Part B to Part A. Mix 20-40 minutes or until a smooth dispersion is apparent.
4. Add triethanolamine (Part C) to the emulsion. Mix vigorously to thicken and reduce oil droplet particle size.
5. When emulsion is smooth and opaque, add Part D. Mix for 5-10 minutes. Part D ingredients will dissolve and thin the emulsion to a sprayable viscosity.

Formula 700-213-6C

SOURCE: BF Goodrich Co.: Waterproof Sunscreen Emulsions

**Sprayable Sunscreen**

<u>Ingredients:</u>	<u>% by Weight</u>
Part A:	
Deionized Water	69.90
Propylene Glycol	5.00
AMP-95	0.15
Germaben II-E	0.70
Part B:	
Finsolv TN	5.00
Butyl Stearate	3.00
Sorbitan Oleate	0.20
Polysorbate 80	0.10
Pemulen TR-2	0.20
Part C:	
Tioveil OP	15.00
Capmul 10G-10-0	0.50
Part D:	
Disodium EDTA	0.10
Sodium Chloride	0.15

Combine Part A ingredients in the mixing vessel at room temperature. Separately combine Part B ingredients, dispersing Pemulen completely. Add Part B to Part A with rapid agitation. Separately combine Part C, then slowly add to the Part A/B emulsion with moderate agitation. Add Part D with moderate agitation to lower lotion viscosity.

**Waterproof Sunscreen (SPF 12)**

This smooth lotion contains no "chemical" absorbers and delivers uniform, non-chalky protection. Pemulen TR-1 ensures high stability and allows easy spreading of the lotion.

<u>Ingredients:</u>	<u>% by Weight</u>
Part A:	
Deionized water	67.80
Propylene Glycol	5.00
Benece1 MP943PR	0.10
AMP-95	0.25
Disodium EDTA	0.05
Germaben II-E	0.30
Part B:	
Finsolv TN	3.00
Ceraphyl 424	4.00
Butyl Stearate	3.00
Sorbitan Oleate	0.10
Pemulen TR-1	0.20
Carbopol 2984	0.20
Part C:	
Tioveil OP	15.00
Capmul 10G-10-0	0.20

Combine Part A ingredients in a vessel which will contain the entire formulation. Heat to 50C. In a separate vessel, combine Part B ingredients. Heat to 50C. Using rapid agitation, add Part B to Part A. Mix to form a smooth, viscous emulsion. Using moderate agitation, slowly add Part C to the emulsion. Slowly cool lotion using continued moderate agitation.

SOURCE: Angus Chemical Co.; Angus Product Formulary: Formula PF-0242E/Formula PF-0243E suggested by BF Goodrich

**Sprayable Sunscreen Based on TiO<sub>2</sub>**

<u>Ingredient:</u>	<u>Weight%</u>	<u>Function</u>
Part A:		
Deionized Water	69.90	Diluent
Propylene Glycol	5.00	Humectant
Aminomethyl Propanol	0.15	Neutralizer
Propylene Glycol and Diazolidinyl Urea and Methylparaben and Propylparaben (1)	0.70	Preservative
Part B:		
Mineral Oil (2)	5.00	Emollient
Butyl Stearate (3)	3.00	Emollient
Sorbitan Oleate	0.20	P.S. Reduction
Polysorbate 80	0.10	P.S. Reduction
Pemulen TR-2 (4)	0.20	Emulsifier
Part C:		
Octyl Palmitate (and) Titanium Dioxide (5)	15.00	Active
Polyglyceryl-10 Decaoleate (6)	0.50	Dispersant
Part D:		
Disodium EDTA	0.10	Chelating Agent
Sodium Chloride	0.08	Viscosity Reducing Agent

- (1) Germaben II-E (Sutton)
- (2) Drakeol 19 (Penreco)
- (3) (Amerchol)
- (4) Acrylates/C10-30 Alkyl Acrylate Crosspolymer (BFGoodrich)
- (5) Tioveil OP (Tioxide Chemicals)
- (6) Capmul 10G-10-0 (Karlshamns)

**Preparation Procedure:**

1. Combine Part A ingredients in the mixing vessel at room temperature.
2. Separately combine Part B ingredients, dispersing Pemulen completely.
3. Add Part B to Part A with rapid agitation.
4. Separately combine Part C, then slowly add to the Part A/B emulsion with moderate agitation.
5. Rapidly agitate (2000 rpm) with a marine-type blade for 20 minutes.
6. Add Part D with moderate agitation to lower lotion viscosity.

**SOURCE:** BF Goodrich Co.; Formula P0040

**Sun Block Lotion**  
(Formula 92-0511)

	<u>% By Weight</u>
<u>Part A:</u>	
D.I. Water	70.40
Glycerin	4.65
Veegum F	1.50
Rhodigel EZ	0.15
<u>Part B:</u>	
Mirasil DM300	2.95
Cetyl Alcohol NF	3.10
Dermalcare GMS/SE	3.00
Isopropyl Myristate	3.25
<u>Part C:</u>	
Octyl Dimethyl PABA	7.00
Syntase 62	3.00
<u>Part D:</u>	
Fragrance, Dye(s), Preservative	Q.S.

Blending Procedure Step 1 (Part A):

Charge water into mixing vessel and add glycerin with mixing. Preblend Veegum F and Rhodigel EZ and, with good agitation, slowly sift this blend into the water/glycerin solution. Mix until smooth with no particles apparent, then begin heating to 70C.

Step 2 (Part B):

Charge Part B components into a vessel and heat with gentle mixing to 70-75C, being sure all components are melted.

Step 3:

When both parts are at 70C, add Part B to Part A, with good mixing, and mix fifteen minutes at 70C. After emulsion is homogeneous, begin cooling with moderate agitation.

Step 4 (Part C):

Premix the two components of Part C, heating very gently if necessary, to obtain a clear solution.

Step 5:

When product reaches 55C, add Part C and continue to cool, with agitation.

Step 6:

At 40C, add remainder of components and cool, with agitation, to 25C.

Typical Formulation Properties

Appearance at 25C	Lt. yellow/beige lotion
pH (10%)	7.3
Viscosity at 25C (RVT #5 @ 20 rpm)	14,000 cps

CTFA Identification

Water, glycerin, isopropyl myristate, cetyl alcohol, glyceryl stearate SE, dimethicone, magnesium aluminum silicate, xanthan gum.

Active ingredients: Padimate O, Oxybenzone

SOURCE: Rhone-Poulenc Surfactants & Specialties: Formula 92-0511

**Suncare Product with Titanium Dioxide**

<u>Ingredients:</u>	<u>% by Weight</u>
A. Crodamol PMP	2.00
Crodamol W	3.00
Fluilan	2.00
Crodacol S-95	0.25
Crill 3	0.75
Crodarom Nuto O	2.50
Crodarom Rhatania O	2.50
B. Deionized water	72.55
Carbomer 2984	0.20
Acrylates/C10-30 Alkyl Acetate Cross Polymer	0.20
Crodesta F-160	1.50
Glycerin	5.00
Na2EDTA	0.05
C. AMP-95	0.25
Water (and) Titanium Dioxide	6.25
D. Propylene Glycol (and) Diazolidinyl Urea (and)	
Methyl Paraben (and) Propyl Paraben	1.00
Dissolve the Na2EDTA of part B in deionized water. Disperse Carbomer 2984 and Pemulen TR-1 into the water of Part B. Disperse Crodesta F-160 in glycerin, then add to the Carbomer/Pemulen dispersion with good mixing. Heat Part B to 75-80C. Combine ingredients of Part A with good mixing and heat to 75-80C. Add Part A to Part B with good mixing. Neutralize with the AMP-95 of Part C and stir until uniform. Slowly add Tioveil AQ with continuing stirring. Cool to 40C and add Part D. Cool to desired fill temperature. Formulation PF-0321 suggested by Croda	

**Titanium Dioxide Based Waterproof Sunscreen**

This smooth lotion contains no "chemical" absorbers and delivers uniform, non-chalky protection. Pemulen TR-1 ensures high stability and allows easy spreading of the lotion. SPF=12.

<u>Ingredients:</u>	<u>% by Weight</u>
A. Deionized water	67.80
Propylene Glycol	5.00
Hydroxypropyl Methylcellulose	0.10
AMP-95	0.25
Disodium EDTA	0.05
Propylene Glycol (and) Diazolidinyl Urea (and)	
Methylparaben (and) Propylparaben	0.30
B. C12-15 Alcohols Benzoate	3.00
Butyl Stearate	3.00
Myristyl Myristate	4.00
Sorbitan Oleate	0.10
Pemulen TR-1	0.20
Carbopol 2984	0.20
C. Octyl Palmitate (and) Titanium Dioxide	15.00
Polyglyceryl-10 Decaoleate	1.00
1. Combine Part A ingredients in a vessel which will contain the entire formulation. Heat to 50C. 2. In a separate vessel, combine Part B ingredients. Heat to 50C. 3. Using rapid agitation, add Part B to Part A. Mix to form a smooth, viscous emulsion. 4. Using moderate agitation, slowly add Part C to the emulsion. Slowly cool lotion using continued moderate agitation.	
SOURCE: Angus Chemical Co.; Formula PF-0323 from B.F. Goodrich	

Sun Protection Gel, Approx. SPF8

An effective sun protection gel especially for sensitive and allergic skin.

<u>Ingredients:</u>	<u>% by Weight</u>
Part A:	
Water	60.60
Part B:	
Carbomer 980 (Carbopol 980)	1.20
Part C:	
Ethanol, 98% denatured	5.00
Benzophenone-4 (Uvinul MS 40)	3.00
Part D:	
2-Phenylbenzimidazol-5-sulfonic acid (Eusolex 232)	3.00
Tris(hydroxymethyl)aminomethane (Tris Amino)	4.00
Water	20.00
Tetrasodium EDTA (Trilon B liquid)	0.30
Imidazolidinyl urea (and) triethylene glycol (and) methylparaben (and) propylparaben (and) dehydroacetic acid (Neo-Dracoco Liquid)	0.40
Aloe vera gel concentrate, 10/1	0.50
d-Panthenol	0.50
Part E:	
Fragrance	0.20
Bisabolol (Dragosanol)	0.10
Emulsifier	1.20

Procedure:

Dissolve B in A using an ultra-turrax stirrer. Add C. Blend D and E; add to ABC. The pH-value is 6.8. The pH should not be over 7 or product could have a strong yellow color.  
Formulation PF-0271E suggested by Dragoco

Waterproof Aerosol Sunscreen (SPF10)

<u>Ingredients:</u>	<u>% by Weight</u>
SD Alcohol 40	43.65
AMP-95	0.35
Dermacryl	2.00
Deionized water	9.00
Octyl Methoxycinnamate	7.50
Menthyl Anthranilate	4.00
Cyclomethicone	3.00
Tocopheryl Acetate	0.50
Dimethyl Ether	30.00

Procedure:

Combine SD alcohol 40 with AMP-95. With good agitation, slowly sift in Dermacryl-79. Mix until complete. Add rest except Dimethyl ether. Continue mixing until complete. Filter, fill and charge with dimethyl ether.

Formulation PF-0318 suggested by National Starch and Chemical

SOURCE: Angus Chemical Co.; Angus Product Formulary



**Sunscreen Containing**  
**Emollient Cream**

<u>A</u> :	Deionized Water	37.00%
	Pecosil WDS-200 (Dimethicone Copolyol Phosphate)	3.00
	Carbomer 934 (2% Aq.)	25.00
	Propylene Glycol	5.00
	Triethanolamine (99%)	1.00
<u>B</u> :	Octyl Methoxycinnamate	7.50
	Pelemol GS (Glyceryl Stearate)	2.00
	Meadowfoam Seed Oil	4.00
	Pelemol 2022 (Octyldodecyl Behenate)	10.00
	Macademia Nut Oil	2.00
	Cetearyl Alcohol	2.00
	Pelemol BB (Behenyl Behenate)	0.50
<u>C</u> :	Propylene Glycol (and) Diazolidinyl Urea (and)	1.00
	Methylparaben (and) Propylparaben	

**Procedure:**

Heat phase A to 70-75C. Heat phase B to 70-75C. Agitate both phase A and B until uniform. Under homogenization add phase B to phase A. When uniform, change to prop. agitation and cool to 45C. Add phase C to AB, and continue prop. agitation to 35C.

Formula 14-109-A

**Sunscreen Lotion**

<u>A</u>	Deionized Water	37.30%
	Pecosil WDS-100 (Dimethicone Copolyol Phosphate)	3.00
	Carbomer 934 (2% Aq.)	25.00
	Propylene Glycol	5.00
	Triethanolamine (99%)	0.70
<u>B</u>	Octyl Methoxycinnamate	7.50
	Pelemol GS (Glyceryl Stearate)	2.00
	Meadowfoam Seed Oil	4.00
	Pelemol ISL (Isostearyl Lactate)	10.00
	Macademia Nut Oil	2.00
	Cetearyl Alcohol	2.00
	Pelemol BB (Behenyl Behenate)	0.50
<u>C</u>	Propylene Glycol (and) Diazolidinyl Urea (and)	1.00
	Methylparaben (and) Propylparaben	

**Procedure:**

1. Heat phase A to 70-75C. 2. Heat phase B to 70-75C. 3. After both phases are uniform, homogenize phase B into phase A. 4. Switch to sweep agitation and cool AB to 45C. 5. Add phase C to AB, and continue sweep agitation to 35C.

Formula 14-107-A

SOURCE: Phoenix Chemical, Inc.: Suggested Formulations

Sunscreen Cream

<u>Ingredient:</u>	Approximate S.P.F.			
	3	4	6	8
		<u>%W/W</u>		
1 Cutina MD	7.0	7.0	7.0	7.0
2 Sipol 16-18 C50	2.0	2.0	2.0	2.0
3 Eumulgin B2	3.0	3.0	3.0	3.0
4 Eutanol G	3.0	3.0	3.0	3.0
5 Cetiol SN	7.0	7.0	7.0	7.0
6 Cetiol SB45	5.0	5.0	5.0	5.0
7 Eusolex 6300	0.75	-	0.37	0.75
8 Eusolex 232	-	0.75	0.37	0.75
9 Sodium Hydroxide	-	0.208	0.10	0.208
10 Hygroplex HHG CLR	4.0	4.0	4.0	4.0
11 Preservative	q.s.			
12 Water to	100.0			

These formulations give non-greasy, soft consistency, moisturising O/W creams with effective UV Protection. The first seven components are heated together to 85C. Component nine is added to the water and this mixture is also heated to 85C at which point component eight is stirred in and neutralized. The oil phase is then mixed into the water phase and dispersed. Component ten can be incorporated whilst the temperature is still high. Mixing should continue down to about 35C.  
Formula TS 269

After-Sun Lotion

<u>Ingredient:</u>	<u>%W/W</u>
1 Cutina MD	3.5
2 Stenol 16-65	1.5
3 Cetiol MM	4.0
4 Eumulgin B2	1.5
5 Eutanol G	5.0
6 Myritol 318	5.0
7 Irgasan DP300	0.1
8 Zinc Carbonate-Basic	5.0
9 Nutrilan L	10.0
10 Repair Complex CLR	3.0
11 Preservative	q.s.
12 Water to	100.0

This formulation gives a pale brown, high viscosity, medium weight O/W lotion which has a soothing, astringent effect on skin.

The first seven components are heated together to 85C. Component eight is then dispersed in the hot molten oil. The water is also heated to 85C. The oil phase is then mixed into the water phase and dispersed.

Mixing should continue down to about 35C at which point the remaining ingredients can be incorporated.  
Formula TS 285

SOURCE: Henkel KGaA: Skin Care Project Formulations

Sun Screen Cream O/W

	<u>%W/W</u>
I Cutina MD	16.0
Eumulglin B1	3.0
Eutanol G	10.0
Myritol 318	5.0
Carrot oil CLR	3.0
Parsol MCX	2.0
II Eusolex 161, water-soluble	2.0
Water	59.0
Formula No. E11-01	

Sun Screen Cream W/O

	<u>%W/W</u>
I Dehymuls K	30.0
Cetiol V	15.0
Parsol MCX	3.0
II Water	52.0
Formula No. E11-02	

Sun Screen Cream W/O

	<u>%W/W</u>
I Dehymuls F	8.0
Novata AB	4.0
Cetiol V	8.0
Vegetable oil	8.0
Vaseline, white	10.0
Parsol MCX	3.0
II Henkel Glycerin 86% DAB 9	3.0
Magnesium sulfate-7-hydrate	0.3
Water	55.7
Formula No. E11-03	

Sun Screen Cream W/O

	<u>%W/W</u>
I Dehymuls F	8.0
Novata AB	4.0
Cetiol V	5.0
Vegetable oil	5.0
Vaseline, white	10.0
Paraffin oil, low viscous	6.0
Parsol MCX	3.0
II Henkel Glycerin 86% DAB 9	3.0
Magnesium sulfate-7-hydrate	0.3
Water	55.7
Formula No. E 11-04	

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Sun Screen Emulsion O/W, Liquid

	<u>%W/W</u>
I Cutina MD	5.0
Lanette O	2.0
Eumulgin B1	1.5
Eumulgin B2	1.5
Rilanit GMO	0.5
Eutanol G	8.0
Paraffin oil, high viscous	4.0
Cetiol J600	6.0
Parsol 1789	2.0
Parsol MCX	4.0
II Henkel Glycerin 86% DAB 9	5.0
Water	60.5
Formula No. E21-02	

Sun Screen Emulsion O/W, Liquid

	<u>%W/W</u>
I Cutina CBS	9.0
Eumulgin B1	1.5
Eumulgin B2	1.5
Rilanit GMO	0.5
Eutanol G	8.0
Paraffin oil, high viscous	4.0
Cetiol J600	6.0
Parsol 1789	2.0
Parsol MCX	4.0
II Henkel Glycerin 86% DAB 9	5.0
Water	58.5
Formula No. E21-03	

Sun Screen Emulsion O/W, Liquid

	<u>%W/W</u>
Cutina MD	5.0
Lanette O	2.0
Eumulgin B2	2.0
Cutina E24	2.0
Rilanit GMO	0.5
Eutanol G	8.0
Paraffin oil, high viscous	4.0
Cetiol J600	6.0
Parsol 1789	2.0
Parsol MCX	4.0

Henkel Glycerin 86% DAB 9	5.0
Water	59.5
Formula No. E21-04	

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Sun Screen Emulsion O/W with Repellent, Liquid

	<u>%W/W</u>
I Cutina MD	3.0
Siebert Stearin L2 SM	2.0
Eumulgin B1	3.0
Cetiol V	10.0
Myritol 318	4.0
Paraffin oil, high viscous	4.0
Repellent 790	10.0
II Eusolex 161, water-soluble	2.0
Triethanolamine	0.2
Veegum solution 4%	40.0
Water	21.8

Formula No. E23-01

Sun Screen Oil

	<u>%W/W</u>
Eutanol G	50.0
Myritol 318	26.0
Carrot oil CLR	2.0
Paraffin oil, high viscous	20.0
Parsol MCX	2.0

Formula E31-01

Sun Screen Oil

	<u>%W/W</u>
Cetiol LC	20.0
Myritol 318	40.0
Eutanol G	38.0
Parsol MCX	2.0

Formula No. E31-02

Sun Screen Oil with Repellent

	<u>%W/W</u>
Eutanol G	30.0
Myritol 318	27.0
Paraffin oil, high viscous	20.0
Parsol MCX	3.0
Repellent 790	10.0
Ethyl alcohol 96%	10.0

Formula No. E31-03

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Sunscreen Lotion w/UV-Titan M212

<u>Ingredients:</u>	<u>% Qty</u>
<u>UV-Titan Premix 7-95-A:</u>	
UV-Titan M212	40.00
Pecosil WDS-100	60.00

Premix should be mixed using a high shear mixer/impeller, i.e., Silverson for 5 minutes at 4000 rpm.

Phase A:

D.I. Water	64.25
Glucam E-20	2.50
Glucamate SSE-20	0.75
UV-Titan Premix	12.50

Phase B:

OHlan	3.00
Glucate SS	4.00
Ritachol	5.00
Pelox P3M	5.00
Witconol APM	3.00

Phase C:

Germaben II	1.00
Fragrance	0.25

Procedure:

Heat Phase A to 72C. Heat Phase B to 75C, add B to A, mix well, pass through colloid mill for 5 minutes or until completely recirculated, begin cooling to room temperature and check sample for dispersion. Adjust pH to 5.5-6.0 with Phosphoric Acid 10% Sol'n.

Sunscreen Lotion w/UV-Titan M262

<u>Ingredients:</u>	<u>%Qty.</u>
<u>UV-Titan 7-95-B:</u>	
UV-Titan M262	40.00
Pecosil PS-100	60.00

Premix should be mixed using a high shear mixer/impeller, i.e., Silverson for 5 minutes at 4000 rpm.

Phase A:

D.I. Water	64.25
Glucam E-20	2.50
Glucamate SSE-20	0.75

Phase B:

OHlan	3.00
Glucate SS	4.00
Ritachol	5.00
Pelox P3M	5.00
Witconol APM	3.00
UV-Titan Premix	12.50

Phase C:

Germaben II	1.00
Fragrance	0.25

Procedure:

Heat Phase A to 72C. Heat Phase B to 75C, add B to A, mix well, pass through colloid mill for 5 minutes or until completely recirculated, begin cooling to room temperature and check sample for dispersion. Adjust pH to 5.5 to 6.0 with Phosphoric Acid 10% Sol'n.

SOURCE: Phoenix Chemical, Inc./Presperse, Inc.:7-97-A/7-97-B

Sun Screen Stick with Total Light Protection (Sun Blocker)

	<u>Parts</u>
Cutina LM	70.0
Cetiol J600	7.0
Eutanol G	8.0
Parsol 1789	1.0
Parsol MCX	5.0
Titanium dioxide	6.0
Talcum	7.0
Skin colored pigments	2.0
Formula No. E41-03	

Lipstick with Light Protection

	<u>Parts</u>
Cutina LM	81.0
Cetiol 868	10.0
Cetiol J600	5.0
Eusolex 8021	4.0
Formula No. E41-04	

Lipstick with Light Protection

	<u>Parts</u>
Cutina LM	80.0
Cetiol 868	8.0
Cetiol J600	4.0
Eusolex 8021	8.0
Formula No. E41-05	

Sun Screen Spray Aerosol-Packed

	<u>%W/W</u>
Eutanol G	55.0
Vegetable oil	20.0
Paraffin oil, high viscous	23.0
Parsol MCX	2.0
Filling: 50 parts solution	
50 parts propellant 12/114 (40:60)	
Formula No. E71-01	

Sun Screen Spray Low-Fat Aerosol-Packed

	<u>%W/W</u>
Eutanol G	25.0
Parsol MCX	2.0
Isopropyl alcohol	73.0
Filling: 50 parts solution	
50 parts propellant 12/114 (40:60)	
Formula No. E71-03	

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Sun Shield Day Cream

A light, pleasant cream. Applies easily and is quickly absorbed into the skin. Offers medium sun-protection while keeping the skin soft and moisturized. Ideal as a skin conditioner for men who enjoy out-of-doors activities.

	<u>Wt. %</u>
A. Mink Oil (Emulan, Light Fraction)	5.00
Glyceryl Stearate (and) PEG 100 Stearate (ICI, Arlacial 165)	4.00
Cetyl Ricinoleate (Cas Chem, Nature Chem CR)	1.00
Stearic Acid TP	2.00
Cetyl Alcohol	0.50
Octyl Dimethyl PABA (Van Dyk, Escalol 507)	3.00
Propyl Paraben	0.15
B. Methyl Paraben	0.20
Triethanolamine 99%	0.50
PEG-8 (UCC, Carbowax 400)	5.00
Quaternium 26 (Van Dyk, Ceraphyl 65)	1.00
Water	77.65

**Procedure:**

Add 75C Phase B to 75C Phase A via propellor agitation.  
Cool to 45C before adding Phase C.

PABA Free Sunscreen Lotion

A low irritation, non-greasy lotion for sensitive skins. Has effective sun protection (SPF about 10) and thus protects against photo-aging. May be used as an under make-up moisturizer.

	<u>Wt. %</u>
A. Water	65.8
Carbomer 941 (Goodrich, Carbopol 941)	0.2
Propylene Glycol USP	2.0
Sodium Cocamidopropyl Sulfosuccinate (Witco, Emcol 4161L)	0.5
B. Cyclomethicone (Dow Corning 345 Fluid)	10.0
Mink Oil (Emulan, Light Fraction)	5.0
Octyl Methoxycinnamate (Van Dyk, Escalol 557)	7.6
Menthyl Anthranilate (Felton, Sunarome UVA)	3.5
Cetearyl Alcohol (and) Ceteareth-20 (Amerchol, Promulgen D)	3.0
Phenyltrimethicone (Dow Corning, 556 Fluid)	1.0
C. Triethanolamine 99%	0.2
D. Germaben II (Sutton)	1.0
Perfume	0.2

**Procedure:**

Add 75C Phase B to 75C Phase A, then add Phase C and stir-cool to 45C before adding Phase D ingredients.

**SOURCE:** Emulan, Inc.: Suggested Formulations



Sun Tan Cream

Creamy soft. Easily spread, quickly absorbed and leaves a silky soft feeling on the skin.

Material/CTFA-Index:

A: Belsil DM 350/Dimethicone	2.00%
Isopropyl Myristate	9.00
Stearyl Alcohol	9.50
Cetyl Alcohol	0.50
Stearic Acid	4.00
Parsol MCX/Octyl Methoxycinnamate	1.50
B: Triethanolamine	1.20
Carbopol 934 (1%ige Lsg.)/Carbomer 934	5.00
Water	67.30
Preservatives, pigments, fragrances	q.s.

Heat A and B each to 70C, add Parsol MCX to A. Mix B into A whilst stirring quickly.

Temperature stability: at 45C over 10 weeks.

Formulation 130 AH

Sun Tan Cream

Creamy soft.

Material/CTFA-Index:

A: Belsil DM 350/Dimethicone	3.00%
Cetyl Alcohol	2.00
Stearic Acid	4.00
Parsol MCX/Octyl Methoxycinnamate	2.00
B: Glycerine	2.00
Triethanolamine	0.90
Wasser dest./Water	86.10
Preservatives, pigments, fragrances	q.s.

Heat A and B to 80C, mix A into B, cool whilst stirring, at approx. 45C add Parsol MCX, stir cold.

Formulation 133 AH

SOURCE: Wacker Silicone: Suggested Formulations

Sun Tan Cream

Firm cream.

Material/CTFA-Index:

A: Crodawax GP 200/Stearyl Alcohol (and) PEG-Stearate	5.00%
Lamecreme KSM/Glyceryl Stearate se	6.00
Belsil DM 35/Dimethicone	5.00
Eusolex 6300	3.00
B: Water	81.00
Preservatives, pigments, fragrances	q.s.
Melt A at 70C, heat the water to 70C. Work A into B.	
Formulation 199 AH	

Sun Tan Cream

Creamy soft.

Material/CTFA-Index:

A: Belsil DM 100/Dimethicone	3.00%
Cetyl Alcohol	2.00
Stearic Acid	4.00
Eusolex 6300	3.00
B: Glycerine	2.00
Triethanolamine	0.90
Water	85.10
Preservatives, pigments, fragrances	q.s.
Heat A and B each to 80C. Work B into A whilst stirring quickly, cool whilst stirring.	
Temperature stability: at 45C over 10 weeks.	
Formulation 198 AH	

Sun Tan Cream

Creamy soft.

Material/CTFA-Index:

A: Belsil DM 350/Dimethicone	3.00%
Cetyl Alcohol	2.00
Stearic Acid	4.00
B: Parsol MCX/Octyl Methoxycinnamate	2.00
Belsil BNP/Boron Nitride	1.00
C: Glycerine	2.00
Triethanolamine	0.90
Wasser dest./Water	85.10
Preservatives, fragrances, perfumes	q.s.
Heat A and C to 80C, stir A into C, cool whilst stirring.	
Add B at approx. 45C, stir cold.	
Temperature stability: at 45C over 10 weeks.	
Formulation 133/2 AH	

SOURCE: Wacker Silicone: Suggested Formulations

Sun Tan Lotion W/OMaterial/CTFA-Index:

A: Hostacerin WO/Polyglyceryl-2-Sesquiostearate (and) Beeswax (and) Mineral Oil (and) Magnesium Stearate (and) Aluminum Stearate	12.00%
Belsil CM 040/Cyclomethicone	25.00
Belsil PDM 20/Phenyl Dimethicone	6.00
Belsil DM 350/Dimethicone	3.00
Isopropyl Myristate	3.50
B: Water	47.50
C: Parsol MCX/Octyl Methoxycinnamate	3.00
Preservatives, pigments, fragrances	q.s.

Mix A, heat the water to 60C and stir into A. Leave to cool somewhat, add Parsol MCX.

Formulation 260 AH

Sun Tan LotionMaterial/CTFA-Index:

A: Teginacid/Glyceryl Stearate (and) Ceteareth-20	6.00%
Isopropyl Myristate	1.00
Belsil DM 350/Dimethicone	1.00
Mineral Oil, low viscosity	4.00
Lanette O/Cetearyl Alcohol	1.00
Belsil CM 1000/Cyclomethicone (and) Dimethiconol	10.00
Parsol MCX/Octyl Methoxycinnamate	3.00
B: Water	71.50
Glycerine	1.50
C: Belsil BNP/Boron Nitride	1.00
Preservatives, fragrances, pigments	q.s.

Heat A and B each to 65-70C, stir B into A, stir C into AB.

Temperature stability: at 45C over 10 weeks.

Formulation 913 AH

SOURCE: Wacker Silicone: Suggested Formulations

Suntan Lotion

Highly moisturizing skin care that affords natural skin protection from Shebu, as well as UV sunscreens with ODP.

<u>Ingredients:</u>	<u>%W/W</u>	<u>Function</u>
1. Distilled/Deionized Water	77.40	----
2. Acritamer 934 (Carbomer 934)	0.20	Stabilizer, Rheology
3. Glycerine	4.00	Emollient
4. Xanthan Gum	0.10	Stabilizer, Thickener
5. Supersat (Hydrogenated Lanolin)	0.50	Film Former
6. Shebu Refined (Shea Butter)	2.00	Emollient
7. Rita GMS (Glyceryl Stearate)	1.00	Emulsifier
8. Mineral Oil	7.00	Emollient
9. Pationic ISL (Sodium Isostearoyl Lactylate)	2.00	Emulsifier, Humectant
10. Rita Stearic Acid	2.00	Emulsifier
11. Octyl Dimethyl PABA	2.00	Sunscreen
12. Triethanolamine (50% Soln.)	1.80	Neutralizer
13. Fragrance	q.s.	Odor
14. Preservative	q.s.	Preservative

Compounding Procedure:

Disperse 2 into 1, hydrate 15 minutes. Add 4 to 3 and disperse into 1, 2. Heat to 165F. Separately combine 5-11, heat to 165F, mix well and combine both phases. Neutralize with TEA (12). Cool with mixing to 120F and add 13 & 14. Cool to 90F. Package.  
Ref. No. 118-70

USFDA Standard SPF 4.11Sunscreen Lotion

Reference: Federal Register 21 CFR 352 et.al.

Used as the standard to which SPF determination studies may be referenced.

<u>Ingredients:</u>	<u>%W/W</u>	<u>R.I.T.A. Products</u>
1. Lanolin Ex Deo. USP	5.00	(Lanolin USP)
2. Homomenthyl Salicylate	8.00	
3. White Petrolatum USP	2.50	
4. Stearic Acid	4.00	(Rita Stearic Acid)
5. Propylparaben	0.05	
6. Methylparaben	0.10	
7. Na2 EDTA	0.05	
8. Distilled/Deionized Water	74.30	
9. Triethanolamine @ 99%	1.00	
10. Propylene Glycol	5.00	

Ref. No. 118-74

SOURCE: R.I.T.A. Corp.: Sun Care Manual

Suntan Lotion with UV Protection

Excellent feel and delivery of UV protection with this Acritamer/stearate emulsion. Reduced irritancy.

<u>Ingredients:</u>	<u>%W/W</u>	<u>Function</u>
1. Distilled/Deionized Water	73.10	----
2. Acritamer 941 (Carbomer 941)	0.10	Stabilizer, Rheology
3. Propylene Glycol	3.00	Emollient
4. Rita IPM (Isopropyl Myristate)	5.00	Emollient
5. Ritaderm (R.I.T.A. Blend)	5.00	Stabilizer, Emollient
6. Ritacetyl (Acetylated Lanolin)	2.50	Film Former
7. Ritalan (Lanolin Oil)	1.00	Emollient
8. Rita CA (Cetyl Alcohol)	0.70	Thickener, Opacifier
9. Rita GMS (Glyceryl Monostearate)	1.50	Emulsifier
10. Rita Stearic Acid	2.00	Emulsifier
11. Mineral Oil	2.00	Emollient
12. Octyl Dimethyl PABA	2.50	Sunscreen
13. Triethanolamine (50% Soln.)	1.60	Neutralizer
14. Fragrance	q.s.	Odor
15. Preservative	q.s.	Preservative

Compounding Procedure:

Disperse 2 into 1, hydrate 15 minutes. Add 3, heat to 165F. Separately combine 4-13 and heat to 165F, mix well. Combine phases at 165F, cool with mixing to 120F. Add 14 and 15, cool to 90F. Package.  
Ref. No. 118-79

Coppertone Type Self Tanner

Efficacious self tanning emulsion with excellent rub out and smooth feel.

<u>Ingredients:</u>	<u>%W/W</u>	<u>Function</u>
1. Distilled/Deionized Water	81.00	----
2. Ritaloe 200M (Aloe Vera Gel)	1.00	Conditioner
3. Ritapro 300 (cetearyl Alcohol and Cetareth-20)	10.00	Emulsifier
4. Ritalan C (Isopropyl Palmitate and Lanolin Oil)	2.00	Emollient
5. Dimethicone	0.75	Lubricant
6. Dihydroxy Acetone	5.00	Tanning Agent
7. Germaben II	0.25	Preservative
8. Patlac LA (Lactic Acid 88%)	q.s.	pH Adjustment

Compounding Procedure:

Dissolve 2 into 1, heat to 165F. Separately combine 3, 4 and 5 and heat to 165F. Combine phases with mixing, cool to 125F and adjust pH with 8 to 5.0(+0.5). Add 6 and preserve. Cool to package.  
Ref. No. 118-134

SOURCE: R.I.T.A. Corp.: Sun Care Manual

**Tanning Oil with Shebu**

Highly emollient oil delivers minimal sun protection. Allows moisturization and permits tanning.

<u><b>Ingredients:</b></u>	<u><b>%W/W</b></u>	<u><b>Function</b></u>
1. Ritalan C (Isopropyl Palmitate and Lanolin Oil)	7.00	Emollient
2. Mineral Oil	84.85	Base Emollient
3. Pationic ISL (Sodium Isostearoyl Lactylate)	2.00	Emollient
4. Ritacetyl (Acetylated Lanolin)	1.75	Emollient
5. Shebu Refined (Shea Butter)	2.00	Emollient
6. Ritaphenone-3 (Benzophenone-3)	2.00	Sunscreen
7. Preservative	0.10	Preservative
8. Anti-Oxidant	q.s.	Anti-Oxidant
9. Fragrance	0.30	Odor

**Compounding Procedure:**

Combine all ingredients and gently warm with mixing until homogeneous (150F). Cool to 120F. Add fragrance, cool and package.

Ref. No. 118-8

**Moisturizing Suntan Oil**  
**Coppertone Type**

Coppertone type, high moisturization allows deep tanning with minimal sunscreen.

<u><b>Ingredients:</b></u>	<u><b>%W/W</b></u>	<u><b>Function</b></u>
1. Mineral Oil	92.41	Emollient
2. Lanolin USP	1.00	Emollient
3. Cocobutter	1.00	Emollient
4. Coconut Oil	1.00	Emollient
5. Simchin Refined (Jojoba Oil)	1.00	Emollient
6. Sweet Almond Oil	1.00	Emollient
7. Benzoic Acid	0.09	Preservative
8. Vitamin E (Tocopheryl Acetate)	1.00	Anti-Oxidant
9. Ritaphenone 3 (Benzophenone-3)	1.00	Sunscreen
10. BHT	0.50	Anti-Oxidant
11. Fragrance	q.s.	Odor
12. Dye	q.s.	Color

**Compounding Procedure:**

Combine all ingredients (1-10) and warm to 150F. Cool to 120F and add Fragrance and Dye. Cool and package.

Ref. No. 118-136

SOURCE: R.I.T.A. Corp.: Sun Care Manual

TiO<sub>2</sub> Oil/Water Sunscreen Lotion

Increased efficacy of TiO<sub>2</sub>. Unique emulsification. High SPF is estimated.

Ingredients:

	<u>%W/W</u>	<u>Function</u>
1. Rita IPM (Isopropyl Myristate)	4.00	Emollient
2. Mineral Oil	6.50	Lubricant
3. Simchin (Jojoba Oil - Refined)	2.50	Emollient
4. Rita SA (Stearyl Alcohol)	1.00	Thickener
5. Petrolatum	2.00	Lubricant
6. Tioveil TG (TiO <sub>2</sub> Dispersed)	5.00	Sunscreen
7. Grillothen LSE 87K (Sucrose Cocoate)	0.10	Emulsifier
8. Grillothen PSE 141G (Sucrose Stearate)	6.00	Emulsifier
9. Glycerol	4.00	Emollient
10. Natural Extract DP (Trimethyl Glycine)	0.20	Anti-Irritant
11. Ritapan DL (dl-Panthenol)	0.80	Conditioner
12. Distilled/Deionized Water	62.90	----
13. Tioveil AQ-G (TiO <sub>2</sub> Dispersed)	5.00	Sunscreen
14. Preservative	q.s.	Preservative
15. Fragrance	q.s.	Odor

Compounding Procedure:

Heat (1-6) and (7-12) separately to 80C. Add (1-6) to (7-12) with mixing. Add 13 while still warm (80C). Cool to 25C with mixing. Add preservative and fragrance at approximately 35C. Ref. No. 118-128

TiO<sub>2</sub> Sunscreen

Smooth, non-whitening lotion using titanium dioxide as an active UV sunscreen.

Ingredients:

	<u>%W/W</u>	<u>Function</u>
1. Distilled/Deionized Water	64.95	----
2. Acritamer 940 (Carbomer 940)	0.30	Stabilizer, Rheology
3. Propylene Glycol	2.00	Emollient
4. Tetrasodium EDTA	0.10	Chelator
5. Mineral Oil	7.50	Emollient
6. Rita IPM (Isopropyl Myristate)	5.00	Emollient
7. Rita Stearic Acid	3.00	Emollient
8. Ritachol 5000 (R.I.T.A. Blend)	1.50	Emulsifier
9. Silicone Oil	2.00	Lubricant
10. TEA (50% Soln.)	0.75	Neutralizer
11. Tioveil AQ (TiO <sub>2</sub> Dispersed)	12.50	Neutralizer
12. Fragrance	0.20	Odor
13. Preservative	0.20	Preservative

Compounding Procedure:

Disperse 2 into 1 and hydrate 15 minutes. Add 3 and 4. Heat to 165F. Separately combine 5-10, heat to 165F and mix well. Combine phases with mixing and add 11. Continue mixing and cooling to 120F. Add 12 and 13. Cool and package. Ref. No. 118-118

SOURCE: R.I.T.A. Corp.: Sun Care Manual

**Titanium Dioxide Based Waterproof Sunscreen**  
(SPF 12\*)

This smooth lotion contains no "chemical" absorbers and delivers uniform, non-chalky protection. Pemulen TR-1 ensures high stability and allows easy spreading of the lotion.

<u>Ingredient:</u>	<u>Weight%</u>	<u>Function</u>
<b>Part A:</b>		
Deionized Water	67.80	Diluent
Propylene Glycol	5.00	Humectant
Hydroxypropyl Methylcellulose (1)	0.10	Spreading aid
Aminomethyl Propanol (2)	0.25	Neutralizer
Disodium EDTA	0.05	Chelating Agent
Propylene Glycol (and) Diazolidinyl		
Urea (and) Methylparaben (and)		
Propylparaben (3)	0.30	Preservative
<b>Part B:</b>		
C12-15 Alcohols Benzoate (4)	3.00	Emollient
Butyl Stearate (5)	3.00	Emollient
Myristyl Myristate (6)	4.00	Emollient
Sorbitan Oleate	0.10	P.S. Reduction
Pemulen TR-1 (7)	0.20	Emulsifier
Carbopol 2984 (8)	0.20	Thickener
<b>Part C:</b>		
Octyl Palmitate (and) Titanium		
Dioxide (9)	15.00	Active
Polyglyceryl-10 Decaoleate (10)	1.00	Dispersant

\*Clinical testing conducted by Product Safety Labs (FDA 21 CFR Part 352, Federal Register, August 25, 1978).

- (1) Benece1 MP943R (Aqualon)
- (2) AMP-95 (Angus Chemical)
- (3) Germaben II-E (Sutton)
- (4) Finsolv TN (Finetex)
- (5) (Amerchol)
- (6) Ceraphyl 424 (Van Dyk)
- (7) Acrylates/C10-30 Alkyl Acrylate Crosspolymer (BFGoodrich)
- (8) Carbomer (BFGoodrich)
- (9) Tioveil OP (Tioxide Chemicals)
- (10) Capmul 10G-10-0 (Karlshamns)

**Preparation Procedure:**

1. Combine Part A ingredients in a vessel which will contain the entire formulation. Heat to 50C
2. In a separate vessel, combine Part B ingredients. Heat to 50C.
3. Using rapid agitation, add Part B to Part A. Mix to form a smooth, viscous emulsion.
4. Using moderate agitation, slowly add Part C to the emulsion. Slowly cool lotion using continued moderate agitation.

SOURCE: BFGoodrich Co.; Formula P0030



**Titanium Dioxide Based Waterproof Sunscreen**  
**With Pemulen TR-1 & Carbopol Ultrez 10**  
**Estimate SPF-18**

This smooth lotion contains no "chemical" absorbers and delivers uniform, non-chalky, water-proof protection. Pemulen TR-1 ensures high stability and allows easy spreading of the lotion.

<u>Ingredients:</u>	<u>% by Weight</u>
A. Deionized water	67.10
Disodium EDTA	0.05
Hydroxypropyl Methylcellulose	0.10
AMP-95	0.25
Propylene Glycol	5.00
B. C12-15 Alcohols Benzoate	3.00
Butyl Stearate	3.00
Myristyl Myristate	4.00
Sorbitan Oleate	0.10
Pemulen TR-1	0.20
Carbopol Ultrez 10	0.20
C. Propylene Glycol (and) Diazolidinyl Urea (and)	
Methylparaben (and) Propylparaben	1.00
D. Octyl Palmitate (and) Titanium Dioxide	15.00
Polyglyceryl-10 Decaoleate	1.00

**Properties:**

pH: 6.2-6.8

Viscosity\* (cPs): 32,000-38,000

Color, odor, appearance: White, thick, creamy emulsion

\*Brookfield RVT @ 20rpm, 25C, #6 spindle

**Procedure:**

1. Combine Part A ingredients in a vessel which will contain the entire formulation. Heat to 50C.
2. In a separate vessel, combine first four Part B ingredients. After mixture is uniform, disperse resins. Mix until uniform.
3. Using rapid agitation, add Part B to Part A. Mix to form a smooth, viscous emulsion.
4. Combine Part D ingredients and mix well.
5. Add Part C to batch.
6. Using moderate agitation, slowly add Part D to the emulsion. Slowly cool lotion using continued moderate agitation.

**SOURCE:** Angus Chemical Co.: Angus Product Formulary:  
 Formulation PF-0345 suggested by B.F. Goodrich

**Transparent Sun-Block Cream**

<u>Ingredient:</u>	<u>%W/W</u>
1 Monomuls 90-0 18	2.0
2 Lameform TGI	4.0
3 Cetiol A	10.0
4 Sipol 1618 C50	1.0
5 Beeswax	3.0
6 Zinc stearate	2.0
7 Tioveil TG	10.0
8 Magnesium sulphate	1.0
9 Glycerine	3.0
10 Preservative	q.s.
11 Water	to 100.0

This formulation gives quite a heavy W/O cream with good emollience and high UV Protection (SPF approx. 12).

The first seven components are melted together at about 85C. Components 8 and 9 are dissolved in the water and this mixture is then heated to the same temperature as the oil phase. The water phase is then added to the oil phase and dispersed. Mixing should continue down to about 35C. The product must then be homogenised using, for example, a Triple Roll Mill.  
Formula TS 475

**Transparent Sunblock Cream**

<u>Ingredient:</u>	<u>%W/W</u>
1 Dehymuls FCE	2.0
2 Lameform TGI	4.0
3 Sipol 16-18 C50	1.0
4 Cetiol A	10.0
5 Beeswax	3.0
6 Zinc Stearate	2.0
7 Tioveil TG	10.0
8 Magnesium Sulphate	1.0
9 Glycerine	3.0
10 Preservative	q.s.
11 Water	to 100.0

The first seven components are melted together at about 85C. Components 8 & 9 are dissolved in the water and this mixture is heated to the same temperature as the oil phase. The water phase is then added to the oil phase and dispersed. Mixing should continue down to about 35C. The product should then be homogenised by, for example, a Triple Roll Mill.  
Formula TS 488

SOURCE: Henkel KGaA: Skin Care Project Formulations

**Waterproof Sunscreen (SPF 12)**

This smooth lotion contains no "chemical" absorbers and delivers uniform, non-chalky protection. Pemulen TR-1 ensures high stability and allows easy spreading of the lotion.

<u>Ingredients:</u>	<u>% by Weight</u>
Part A:	
Deionized water	67.80
Propylene Glycol	5.00
Benece1 MP943PR	0.10
AMP-95	0.25
Disodium EDTA	0.05
Germaben II-E	0.30
Part B:	
Finsolv TN	3.00
Ceraphyl 424	4.00
Butyl Stearate	3.00
Sorbitan Oleate	0.10
Pemulen TR-1	0.20
Carbopol 2984	0.20
Part C:	
Octyl Palmitate (and) Titanium Tioveil OP	15.00
Capmul 10G-10-0	0.20

**Procedure:**

Combine Part A ingredients in a vessel which will contain the entire formulation. Heat to 50C. In a separate vessel, combine Part B ingredients. Heat to 50C. Using rapid agitation, add Part B to Part A. Mix to form a smooth, viscous emulsion. Using moderate agitation, slowly add Part C to the emulsion. Slowly cool lotion using continued moderate agitation.

SOURCE: Angus Chemical Co.; Angus Product Formulary: Formulation PF-0243E suggested by B.F. Goodrich

**Sun Tan Cream**

Creamy soft.

**Material/CTFA-Index:**

A: Cetyl Alcohol	2.00%
Stearic Acid	4.00
Eusolex 4360/Benzophenone-3	1.50
Eusolex 8020	1.50
B: Glycerine	2.00
Triethanolamine	0.90
Water	78.10
C: Belsil CM 1000/Cyclomethicone(a.)Dimethiconol	10.00
Preservatives, perfume, pigments	q.s.

Heat A and B to 80C. Stir B into A. Stir until cool.  
Temperature stability: at 45C more than 9 weeks.

SOURCE: Wacker Silicone: Formulation 740 AH

**Waterproof Sunscreen Lotion (SPF 15)**

<u>Ingredient:</u>	<u>Weight%</u>
Part A:	
Deionized Water	72.75
Hydroxypropyl Methylcellulose (1) (1% solution)	10.00
Quaternium-15 (2)	0.15
Disodium EDTA	0.05
Part B:	
Octyl Methoxy Cinnamate	7.00
Octyl Salicylate	3.00
Oxybenzone	2.00
C12-15 Alcohols Benzoate (3)	4.00
Pemulen TR-1 (4)	0.25
Carbopol 954 (5)	0.20
Methylparaben	0.15
Propylparaben	0.05
Part C:	
Triethanolamine (99%)	0.40

**Procedure:**

- 1) Combine Part A ingredients. Mix until homogeneous.
- 2) Combine first four part B ingredients in a separate vessel. Mix until oxybenzone has dissolved. Warming will hasten dissolution.
- 3) Disperse last four Part B ingredients in Part B vessel. Mix to break-up lumps.
- 4) With moderate agitation, add Part B to Part A. Mix for 20-40 minutes or until a smooth, non-grainy dispersion is apparent. Add Part C (triethanolamine) and mix vigorously until a smooth, lustrous product is obtained.

- (1) Methocel E4M (Dow)
- (2) Dowicil 200 (Dow)
- (3) Finsolv TN (Finetex)
- (4) Acrylates/C10-30 Alkyl Acrylate Crosspolymer (BFGoodrich)
- (5) Carbomer (BFGoodrich)

SOURCE: BF Goodrich Co.: Formula P0006

**Waterproof Sunscreen Lotion (SPF 15)**

<u>Ingredient:</u>	<u>Weight%</u>	<u>Function</u>
<b>Part A:</b>		
Deionized Water	72.75	Diluent
Hydroxypropyl Methylcellulose (1) (1.0% Solution)	10.00	Aqueous Smooth- ing Aid
Quaternium-15 (2)	0.15	Preservative
Disodium EDTA	0.05	Chelating Agent
<b>Part B:</b>		
Octyl Methoxy Cinnamate	7.00	UVB Absorber
Octyl Salicylate	3.00	UVB Absorber
Oxybenzone	2.00	UVA Absorber
C12-C15 Alcohols Benzoate (3)	4.00	Emollient/Sol- vent
Pemulen TR-1 (4)	0.25	Emulsifier
Carbopol 2984 (5)	0.20	Thickener
Methyl Paraben	0.15	Preservative
Propyl Paraben	0.05	Preservative
<b>Part C:</b>		
Triethanolamine (99%)	0.40	Neutralizing Agent

- (1) Methocel E4M (Dow)
- (2) Dowicil 200 (Dow)
- (3) Finsolv TN (Finetex)
- (4) Acrylates/C10-C30 Alkyl Acrylate Crosspolymer (BFGoodrich)
- (5) Carbomer (BFGoodrich)

**Preparation:**

1. Combine Part A ingredients. Mix until homogeneous.
2. Combine first four Part B ingredients in a separate vessel. Mix until oxybenzone has been dissolved. Warming will hasten dissolution.
3. Disperse last four B ingredients in Part B vessel. Mix to break-up lumps.
4. With vigorous agitation, add Part B to Part A. Mix for 20-40 minutes or until a smooth, non-grainy dispersion is apparent. Add Part C (triethanolamine) and mix until a smooth, lust-  
rous product is obtained.

Formula 700-202-49F

SOURCE: BF Goodrich Co.: Waterproof Sunscreen Emulsions

Waterproof Sunscreen with Ultrafine TiO<sub>2</sub>

Easy-to-blend o/w cream yields a nontacky, waterproof, oil-proof finish. Hydrophobic/lipophobic treatment on the TiO<sub>2</sub> for easier dispersion also prevents it from destabilizing the emulsion.

<u>Ingredients:</u>	<u>% by Weight</u>
A. Deionized water	60.80
Propylene glycol	5.00
Benecel	0.10
AMP-95	0.25
Versene	0.05
Germaben IIE	0.30
B. Ceraphyl 424	4.00
Acrylates/C10-30 alkyl acrylate crosspolymer	0.20
Carbomer 2984	0.20
Sorbitan oleate	0.10
C. PF-10 STT-65C-S	10.00
Caprol 10G-10-0	1.00
C12-15 alkyl benzoate	15.00
Butyl stearate	3.00

Procedure:

Mix A; heat to 50C. Mix B, heat to 50C. Grind C, add to B and mix well. Add BC at 50C to A at 50C while homomixing. Sweep to 40C.

Formulation PF-0325 suggested by Kobo

ZnO/TiO<sub>2</sub>, Sunscreen Lotion, SPF-15

Light-textured, water-resistant sunscreen utilizes a dispersion of surface-treated titanium dioxide and zinc oxide. Although the projected SPF of this treated inorganic sunblock formula is 15, "in vivo" testing SPF 17+.

<u>Ingredients:</u>	<u>% by Weight</u>
A. Demineralized water	50.20
B. Dermacryl LT	1.00
C. AMP-95	q.s.
D. Xanthan gum	0.30
Propylene glycol	2.00
E. 79790 Dispersion UF TiO <sub>2</sub> and Z-Cote HP-1	30.00
DC200 Fluid	0.50
Cetearyl alcohol	1.50
Lipomulse 165	1.50
Brookswax P	2.00
F. Polysorbate-20	5.00
Fragrance	q.s.
G. Germaben II	1.00
Brookosome SO	5.00

Procedure:

Disperse B in A; heat to 80C. Adjust pH to 8.0 with C. Add D to ABC; mix 30 minutes. Combine E; heat to 85C. Add E to ABCD; mix and cool to 40C. Premix F; add to batch. Homogenize until uniform. Cool to room temperature; add G.

Formulation PF-0324 suggested by Cardre

SOURCE: Angus Chemical Co.; Angus Product Formulary

**Water Resistant Sunscreen**

<u>Ingredient:</u>	<u>%W/W</u>
1 Dehymuls HRE7	7.0
2 Cetiol SN	10.0
3 Eutanol G	6.0
4 Microcrystalline wax	1.0
5 Zinc stearate	1.0
6 Parsol MCX	6.0
7 Parsol 1789	1.0
8 Glycerine	5.0
9 Magnesium sulphate	0.5
10 Preservative	q.s.
11 Water	to 100.0

This formulation gives a water resistant W/O sun screen lotion.

The first seven components are melted together at about 85C. Components 8 & 9 are dissolved in the water and this mixture is then heated to the same temperature as the oil phase. The water phase is then added to the oil phase and dispersed. Mixing should continue down to about 35C  
Formula TS 463

**Water Resistant Sunscreen**

<u>Ingredient:</u>	<u>%W/W</u>
1 Dehymuls HRE7	7.0
2 Cetiol SN	10.0
3 Tioveil MOTG	6.0
4 Microcrystalline wax	1.0
5 Zinc stearate	1.0
6 Glycerine	5.0
7 Magnesium sulphate	0.5
8 Preservative	q.s.
9 Water	to 100.0

This formulation gives a water resistant W/O sun screen cream. On application, the Tioveil shows white on the skin, but is easily rubbed in.

The first five components are melted together at about 85C. Components 6 & 7 are dissolved in the water and this mixture is then heated to the same temperature as the oil phase. The water phase is then added to the oil phase and dispersed. Mixing should continue down to about 35C.  
Formula TS 474

SOURCE: Henkel KGaA: Skin Care Project Formulations

Water Resistant Sunscreen Lotion

	Wt. %
A. Stearic Acid, TP	3.50
Dimethicone (and) Trimethylsiloxysilate (Dow Corning, 593 Fluid)	10.00
Octyl Dimethyl PABA (Van Dyk, Escalol 507)	5.00
C12-15 Alcohols Benzoate (Finetex, Finsolv TN)	1.00
Cetyl Ricinoleate (Cas Chem, Nature Chem CR)	0.80
Glyceryl Stearate (Van Dyk, Cerasynt SD)	1.50
Mink Oil (Emulan, Heavy Fraction)	5.00
Propyl Paraben	0.15
B. Sorbitol, 70% (ICI, Sorbo)	5.00
Triethanolamine, 99%	1.00
Methyl Paraben	0.25
Water	66.80

**Procedure:**

Add 75C Phase B to 75C Phase A via propellor agitation.

Sunblock

A water resistant sun protective lotion. Screens out UV-A and UV-B. Effective sunblock. SPF approximately 15.

	Wt. %
A. Soya Sterol (Generol 122, Henkel)	1.30
Isopropyl Lanolate (Amerlate P, Amerchol)	1.50
Mink Oil (Emulan Light)	21.00
Glyceryl Stearate (and) Stearyl Alcohol (and) Sodium Lauryl Sulfate (Cerasynt WM, Van Dyk)	3.00
Stearic Acid XXX (Emersol 132, Emery)	3.60
Cetyl Alcohol	0.50
Ethyl Dihydroxypropyl PABA (and) Propylene Glycol (Amerscreen P-80/20, Amerchol)	6.00
Benzophenone-3 (Escalol 567, Van Dyk)	3.00
Propyl Paraben	0.10
B. Propylene Glycol USP	3.00
Triethanolamine, 99%	0.75
Water	32.05
Methyl Paraben	0.20
C. Microcrystalline Cellulose (Avicel RC 591, FMC)	3.50
Water	20.00
DMDM Hydantoin (Glydant, Lonza)	0.30
Perfume	0.20

**Procedure:**

Melt Phase A ingredients to 80C. Add 80C Phase B via high shear propellor. Stir cool to 30C. Add Phase C.

SOURCE: Emulan, Inc.: Suggested Formulations



**W/O SPF20 Sunscreen with Eldew**

<u>Ingredients/Trade Name:</u>	<u>% by Weight</u>
Part A:	
Stearic Acid Triple Pressed	4.00
Cetyl Alcohol	1.00
DEA-Cetyl Phosphate/Amphisol	2.00
Dimethicone (and) Trimethylsiloxysilicate/Dow Corning 593	
Octyl Methoxycinnamate/Parsol MCX	5.00
Benzophenone-3/Uvinul M-40	7.50
Octyl Salicylate/Uvinul 0-18	6.00
Octyldodecyl Neopentanoate/Elfac I-205	5.00
Methylparaben (and) Butylparaben (and) Ethylparaben (and) Propylparaben/Nipastat	0.20
Di (chlolesteryl, behenyl, octyldodecyl) N-Lauroyl-L-Glutamic Acid ester/Eldew CL-301	
	5.00
Part B:	
Deionized Water	57.75
Sodium Carbomer/PNC 400	0.25
Part C:	
Diazolidinyl Urea/Germall II	0.30
Deionized Water	1.00

Combine Part A and heat to 75 degrees Centigrade with mixing. Heat deionized water of Part B to 75 degrees C. Disperse PNC 400 into the water with high shear mixing until uniform gel is formed. Add part A to part B with mixing. Hold at 75 degrees for 15 minutes. Cool to 40 degrees C and add premixed part C with continuous mixing. Cool to 30 degrees C.

Appearance: White, smooth, shiny cream

pH: 6.00 to 6.50

Viscosity: 60,000-80,000 cps (RVT #6 @ 10 rpm @ 25 degrees C)

**Sunscreen Lip Balm with Eldew**

<u>Ingredient/Trade Name:</u>	<u>% by Weight</u>
Part A:	
Carnauba Wax #1 Yellow	4.00
Ozokerite Wax JH1680	4.00
Synthetic Beeswax JH-1508	10.00
Propylparaben	0.15
Cholesteryl/Behenyl/Octyldodecyl Lauroyl Glutamate/Eldew CL-301	10.00
Part B:	
Castor Oil	26.55
PPG-3 Hydrogenated Castor Oil/Hetester HCP	15.00
Glyceryl Triacetyl Hydroxystearate/Hetester HCA	15.00
Octyl Methoxycinnamate/Parsol MCX	7.50
Benzophenone-3/Uvinul M-40	5.00
Octyl Salicylate/Uvinul 0-18	2.00
Tocopheryl Acetate/Vitamin E Acetate	0.60
Part C:	
Bisabolol (Synthetic)	0.20

Heat Part A ingredients to 80 degrees Centigrade. Mix until all solids are completely dissolved. Add Part B ingredients. Mix until uniform. Cool to 65 degrees Centigrade. Add Part C. Mix well. Fill.

SOURCE: Ajinomoto USA, Inc.: Suggested Formulations

# **Section XIII**

## **Miscellaneous**

Cleanser, Clear, Liquid

	<u>%W/W</u>
Dehyton AB30	30.0
Viscontran HEC 30 000 PR-2% solution	69.0
Perfume, water-soluble	1.0

Note: WAS 6%, high viscous  
Formula No. L610-01

Cleanser, Disinfecting, Transparent, In Gel Form

	<u>%W/W</u>
Texapon N70	30.0
Dehyton AB30	20.0
Bactericide	0.5
Water	49.5

Note: WAS 27%  
Formula No. L610-03

Footbath, Fungicide, Liquid

	<u>%W/W</u>
Dehyton AB30	30.0
Fungicide DA	2.0
Perfume	1.0
Water	67.0

Note: WAS 9%  
Formula No. L610-05

Washing Cream for Tube Filling

	<u>%W/W</u>
Texapon N40	50.00
Comperlan 100	3.00
Cutina AGS	5.00
Hydagen P	2.00
Citric acid	0.05
Perfume	1.00
Water	38.95

Note: WAS 17%  
Formula No. L610-07

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Clear Golden Hydrogel

<u>Ingredients:</u>	<u>% by Weight</u>
A. Water (Distilled)	86.98
EDTA Disodium	0.10
Cellosize PCG-10	1.50
B. Dow Corning 193	3.00
C. Suttocide A	0.70
Pronalen Fruit Acids AHA-20	4.00
AMP-95	0.60
Extrapone Bamboo Timiron Sungold	3.00
Sparkle MP-29	0.02
Perf. Rain Forest	0.10

Note: Maintain pH close to 5.50 (not over), correct with AMP, if necessary.

Description:

Product is mild due to action of Dow Corning 193 which provides smooth feel on the skin.

Procedure:

1. Put water in the tank, add EDTA, mix and start heating.
2. Sprinkle Cellosize on top and heat the mixture up to 75C.
3. Then start cooling the mixture and add DC 193.
4. Gel will be formed on cooling.
5. When temperature is below 50C, add Suttocide and mix and after that add AHA slowly.
6. The addition of AHA will break the gel and then addition of AMP-95 will help to reform it.
7. Premix pigment with plant extract and add slowly, and after that perfume.
8. Stop mixing at 25C, take sample for QA and when approved pack the product.

Formulation PF-0309 suggested by Dow Corning

Glycerol Gel Base

Other ingredients may be incorporated as desired.

<u>Ingredients:</u>	<u>% by Weight</u>
Water, deionized	9.00
Stabileze 06	0.50
AMP-95	0.50
Glycerine	89.70
Additives	q.s.
Germall II	0.30

Procedure:

Disperse Stabileze in water with stirring for 10 minutes. Heat the dispersion to 70-80C for 15 to 20 minutes, until thickening occurs. Start cooling. Add AMP with stirring. Mix until uniform. Add glycerine slowly over 10 minutes with stirring. Stir until uniform gel is obtained. Add remaining ingredients, mixing thoroughly after each addition.

Formulation PF-0244E suggested by ISP

SOURCE: Angus Chemical Co.: Angus Product Formulary

**Dentifrice Gel**

Dentifrice gel with anti-caries active sodium monofluorophosphate (Sodium MFP).

<u>Ingredient:</u>	<u>Weight%</u>	<u>Function</u>
<b>Part A:</b>		
Glycerin	22.00	Humectant
Carbopol 1382 (1)	0.50	Gelling Agent
<b>Part B:</b>		
Deionized Water	24.43	Diluent
Tetrasodium Pyrophosphate	0.25	Chelant
Sodium Saccharine	0.20	Sweetener
Sodium Benzoate	0.50	Preservative
Sodium MFP	0.76	Active
<b>Part C:</b>		
Sodium Hydroxide (50%)	0.40	Neutralizer
<b>Part D:</b>		
Dicalcium Phosphate, Dihydrate	48.76	Abrasive
<b>Part E:</b>		
Sodium Lauryl Sulfate (2)	1.20	Surfactant
Flavor	1.00	

(1) Carbomer (BFGoodrich)

(2) Texapol LS 100F (Henkel)

**Preparation Procedure:**

1. In a stainless steel vacuum mixer tank at ambient temperature and pressure, slowly add Carbopol to glycerin with rapid agitation.
2. In separate vessel combine Part B with moderate agitation until a clear solution is formed, then combine with Part A with moderate agitation.
3. Add Part C to Parts A and B with moderate agitation.
4. Add Part D with slow mixing until powder is wetted.
5. Turn on vacuum and mix at moderate speed 30 minutes, introduce Part E. Mix 5-7 minutes at very slow speed.

**SOURCE:** BFGoodrich Co.; Formula C-0037

Denture Cleanser in Powder Form

	%W/W
I Texapon K12	0.50
Sodium tripolyphosphate	54.45
Sodium carbonate	15.00
Sodium perborate	10.00
Sodium chloride	1.00
Borax, in fine powder form	15.00
Chloramine T	3.00
II Phenolphthalein	0.05
III Peppermint oil P17	1.00

**Preparation:**

Pass I through a sieve with a mesh size of 0.5 mm. Finely grind II with part of I and add it to the whole amount of I. Wet this mixture with III and mix it in a mixing drum.  
Formula No. K81-01

Denture Cleaner in Tablet Form

	%W/W
I Texapon K12	0.5
Potassium persulfate	30.0
Sodium perborate	30.0
Sodium carbonate	37.0
Potassium hexacyanoferrate II	2.0
II Peppermint oil P17	0.5

**Preparation:**

Pass I through a sieve with a mesh size of 0.5 mm and wet with II. The substances are well mixed in a mixing drum and then compressed to form tablets.  
Formula No. K81-05

Denture-Cleaning Tablets

	%W/W
I Sodium tripolyphosphate	38.5
Colorant	0.1
II Potassium persulfate	16.0
Texapon K12	0.5
Sodium perborate	29.9
Sodium bicarbonate	7.0
Chloramine T	0.5
III Peppermint oil P17	0.5

**Preparation:**

Grind I, mix with II and pass through a sieve with a mesh size of 0.5 mm. Wet with III and mix well in a mixing drum. The mixture is then compressed to form tablets.  
Formula No. K81-06

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Detackification of Carbomer Gel

	<u>Weight%</u>
<u>A</u> Deionized Water	90.30
Carbomer 940	0.80
Potassium Sorbate	0.10
<u>B</u> Deionized Water	2.00
Triethanolamine (99%)	0.80
<u>C</u> Pelemol G7A (Glycereth-7 Triacetate)	5.00
<u>D</u> Propylene Glycol (and) Diazolidinyl Urea (and)	1.00
Methylparaben (and) Propylparaben	

**Lab Procedure:**

Disperse Carbomer in phase A water. When a uniform dispersion is obtained add Potassium Sorbate with adequate agitation. Add phase B to phase A under sweep agitation. When a uniform gel is obtained, add phase C to AB under slow sweep agitation. Continue slow sweep agitation and add phase D to ABC.  
 \*The addition of Pelemol G7A to a Carbomer gel will, in many cases, completely eliminate the gel's transitional tackiness on dry-down.

Formula 14-42-A

Detackification of Carbomer Gel

	<u>Weight%</u>
<u>A</u> Deionized Water	90.30
Carbomer 940	0.80
Potassium Sorbate	0.10
<u>B</u> Deionized Water	2.00
Triethanolamine (99%)	0.80
<u>C</u> Glycerin	5.00
<u>D</u> Propylene Glycol (and) Diazolidinyl Urea (and)	1.00
Methylparaben (and) Propylparaben	

**Lab Procedure:**

Disperse Carbomer in phase A water. When a uniform dispersion is obtained add Potassium Sorbate with adequate agitation. Add phase B to phase A under sweep agitation. When a uniform gel is obtained, add phase C to AB under slow speed agitation. Continue slow sweep agitation and add phase D to ABC.

\*The addition of Pelemol G7A to a Carbomer gel will, in many cases, completely eliminate the gel's transitional tackiness on dry-down.

Formula 14-42-B

SOURCE: Phoenix Chemical, Inc.: Suggested Formulations

Liposome Gel

A soothing gel combining the benefits of vitamins A, C and E in a synergistic and effective liposome system.

<u>Ingredients:</u>	<u>%W/W</u>	<u>Function</u>
1. Distilled/Deionized Water	87.40	----
2. Acritamer 940 (Carbomer 940)	0.50	Gelling Agent
3. Xanthan Gum	0.10	Gelling Agent
4. 1,3-Butylene Glycol	5.00	Solubilizer
5. Dimethicone Copolyol	0.10	Conditioning
6. Shebu WS (Shea Butter)	1.00	Conditioning
7. TEA @ 99%	0.40	pH Adjuster
8. Promois ECP (Collagen)	0.20	Biological Additive
9. Glydant	0.20	Preservative
10. Fragrance	0.10	Odor
11. Ravisome ACE (Vitamin Blend)	5.00	Liposome

Compounding Procedure:

Disperse item 2 in water. Add items 3 and mix until dissolved. Add items 4, 5 and 6 separately. Add TEA until batch thickens. Add items 8, 9, 10 and 11. The pH of a gel is 5.5.  
Ref. No. 119-6

Liposome Gel

A soothing gel combining the benefits of Hyaluronic Acid delivered deep in the skin via Ravisome.

<u>Ingredients:</u>	<u>%W/W</u>	<u>Function</u>
1. Distilled/Deionized Water	86.87	----
2. Acritamer 940 (Carbomer 940)	0.70	Viscosity
3. Tetrasodium EDTA	0.10	Stability
4. 1,3-Butylene Glycol	4.00	Solubilizer
5. Methylidibromo Glutaronitrile and Phenoxylethanol	0.30	Preservative
6. Sodium Hydroxide @ 10%	q.s.	pH Adjuster
7. Ravisome HA (Alcohol and Lecithin and Hyaluronic Acid)	8.00	Moisturization
8. FD&C Blue No. 1 Solution @ 10%	0.03	Color

Compounding Procedure:

Disperse Acritamer in water with slow agitation. Add items 3-5 with continuous agitation. Adjust pH with item 6 to 6.2-7.0. Then add Ravisome and dyes.  
Ref. No. 119-120

SOURCE: R.I.T.A. Corp.: Skin Care Formulary



Mouth-Wash Gargle, Foaming

	<u>%W/W</u>
I Texapon K12	1.8
Cremogen camomile spec.	0.5
Cremogen witch hazel extract	5.0
Arnica tincture	5.0
II Water	75.5
III Menthol	0.2
Thymol	0.5
Peppermint oil P17, water-soluble	1.5
IV 96% ethyl alcohol	10.0

**Preparation:**

Dissolve I in II, dissolve III in IV and mix both solutions.  
Formula No. K 51-01

Mouth-Wash Gargle, Emulsifying

	<u>%W/W</u>
I Cetiol HE	4.0
Water	13.0
II Henkel Glycerin 86% DAB 9	18.0
III Mouth-wash aroma	10.0
96% ethyl alcohol	55.0

**Preparation:**

Mix the phases in the order given above.  
Formula No. K51-02

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Oil-Liposome-Gel

<u>Ingredients:</u>	<u>% by Weight</u>
Dissolve:	
Water, demineralized	52.80
Panthenol	1.00
Add:	
Ethanol DAB 9	13.30
Add gradually and homogenize approximately 20 minutes:	
Carbopol 940	0.80
Add gradually and homogenize approximately 15 minutes:	
Jojoba Oil	5.00
Titanium dioxide	0.50
For neutralization add gradually and homogenize approx- imately 15 minutes:	
Tris Amino	1.30
Water, Demineralized	5.00
Add and homogenize:	
Natipide II (20% Phospholipids)	20.00
Cont. 1% Vitamin E-acetate, 1% Vitamin C-palmitate	
Add and homogenize:	
Perfume oil/Sarag 607,423D	0.30

This formulation is preserved by 16 weight percent ethanol.

Formulation PF-0248E suggested by RPR Nattermann  
Phospholipid GmbH

Vitamin-Liposome-Gel

<u>Ingredients:</u>	<u>% by Weight</u>
Dissolve:	
Water, demineralized	54.60
Ethanol DAB 9	13.30
Add gradually and homogenize approximately 20 minutes:	
Carbopol 940	0.80
Mix, add gradually and homogenize approximately 20 minutes:	
Carrot Oil	1.25
Macademia Oil	3.75
For neutralization, add gradually and homogenize approx- imately 15 minutes:	
Tris Amino	1.00
Water, demineralized	5.00
Add and homogenize:	
Natipide II (20% Phospholipids)	20.00
Cont. 1% Vitamin E-acetate, 1% Vitamin C-palmitate	
Add and homogenize with:	
Perfume oil/Diamela 15,544RB	0.30

This formulation is preserved by 16 weight percent ethanol.

Formulation PF-0247E suggested By RPR Nattermann Phospho-  
lipid GmbH

SOURCE: Angus Chemical Co.: Angus Product Formulary

Personal Hygiene Cleansers  
Cleaner, Disinfectant, Clear

	%W/W
Texapon MLS	60.0
Bactericide	0.5
1,2-propylene glycol	5.0
Water	34.5

Note: WAS 20%, low viscous  
Formula No. L611-01

Cleanser, Disinfectant, Clear

	%W/W
Texapon SBN	60.0
Bactericide	0.5
1,2-propylene glycol	3.0
Sodium chloride	2.0
Water	34.5

Note: WAS 18%, low viscous  
Formula No. L611-03

Cleanser, Bactericide, Clear, Liquid

	%W/W
Dehyton AB30	15.0
Dehyquart SP	0.1
Viscontran HEC 30 000 PR-2% solution	60.0
Perfume	0.2
Water	24.7

Note: WAS 4.5%, medium viscous  
Formula No. L611-05

Cleanser, Disinfecting, Aerosol-Packed

	%W/W
Texapon ASV	50.0
Comperlan OD	4.0
Bactericide	0.5
Ethyl alcohol 96%	2.5
Water	43.0

Filling: 90 parts solution  
10 parts propellant 12/114 (40:60)

Note: WAS 19%  
Formula No. 611-06

SOURCE: Henkel KGaA: Cosmetic Model Formulae

Personal Hygiene Cleansing Emulsions  
(Cleansers in Emulsion Form for Personal Hygiene)  
Cleansing Lotion, Disinfecting, Pearly

	<u>%W/W</u>
Texapon N40	60.0
Comperlan KD	7.0
Cutina AGS	7.0
Paraffin oil, high viscous	10.0
Bactericide	0.5
Polyglycol 400	10.0
Water	5.5

Note: WAS 24%, medium viscous

Preparation: The substances are heated to 60-70C and then stirred whilst cooling.

Formula No. L612-01

Cleansing Lotion, Disinfecting, Pearly

	<u>%W/W</u>
Texapon EVR	40.0
Texapon N40	40.0
Bactericide	0.5
1,2-propylene glycol	5.0
Water	14.5

Note: WAS 26%, medium viscous

Formula No. L612-02

Personal Hygiene Spray

	<u>%W/W</u>
Eutanol G	1.0
Cetyl trimethyl ammonium bromide	0.1
Ethyl alcohol 96%	2.0
Perfume	0.5
Propellant 12/114 (40:60)	96.4

Note: It is advisable to use a bath oil perfume which has been tested for its compatibility with the mucous membranes and stability in aerosol cans.

Formula No. L71-01

Personal Hygiene Spray(Dry Spray)

	<u>Parts</u>
Hydagen DEO	1.50 g
Myritol 318	1.95 g
Frigen 12 propellant	96.55 g

Formula No. L71-02

SOURCE: Henkel KGaA: Cosmetic Model Formulae

**Quick Emulsifying Base-A**

<u>Ingredients:</u>	<u>%w/w</u>
Dimethicone Copolyol (Abil B 8852)	10.0
PEG-25 Glyceryl Trioleate (Tagat T0)	18.0
Avocado Oil	20.0
Calendula Oil	10.0
Caprylic/Capric Triglycerides (Tegosoft CT)	42.0
Color, Fragrance	Q.S.

**Quick Emulsifying Base-B**

<u>Ingredients:</u>	<u>%w/w</u>
Dimethicone Copolyol (Abil B 8852)	10.0
PEG-25 Glyceryl Trioleate (Tagat T0)	13.0
Avocado Oil	20.0
Mineral Oil	50.0
Isopropyl Myristate (Tegosoft M)	7.0
Color, Fragrance	Q.S.

**Quick Emulsifying Base-C**

<u>Ingredients:</u>	<u>%w/w</u>
Dimethicone Copolyol (Abil B 8852)	10.0
PEG-25 Glyceryl Trioleate (Tagat T0)	10.0
Avocado Oil	15.0
Mineral Oil	25.0
Isopropyl Myristate (Tegosoft M)	30.0
Caprylic/Capric Triglycerides (Tegosoft CT)	10.0
Color, Fragrance	Q.S.

**Procedure:**

Add the ingredients in order, mixing well between additions. Bases are clear with a honey-like viscosity.

**Uses:**

Blooming bath oils, instant lotions for after bath. After sun emollient lotions.

When these formulas are added to water or to wet skin, emollient and non-sticky emulsions are formed.

**SOURCE:** Goldschmidt Chemical Corp.: Suggested Formulations

**Shampoo Concentrate for Dogs and Cats**  
**(Formula 92-0604)**

	<u>% by Weight</u>
Rhodapex NA 61	33.0
Alkamide DC-212/S	20.0
Mirataine BET C30	26.0
Sodium Chloride	4.0
Deionized Water	17.0
Citric Acid	q.s. pH to 8.0+-0.2
Fragrance, dye, preservative	q.s.

**Blending Procedure:** In the main manufacturing vessel, blend the Rhodapex NA 61 and the NaCl and begin heating to 50-55C. At that temperature, add the Alkamide DC-212/S and the Mirataine BET C30 and mix until the batch is homogeneous and clear. Let batch cool to 40-45C and add water, fragrance, dye and preservative. Continue to let batch cool to room temperature.

**Note:** The viscosity of the letdown at different ratios can be adjusted by the amount of NaCl added to the formula.

**Formulation Product:** This product can be diluted from 3:1 to 15:1

**Flea & Tick Shampoo for Dogs**

	<u>% by Weight</u>
SD40 Alcohol	2.00
Pyrocid 5192 (McLaughlin Gormley King Co.)	0.44
Rhodapex MA 360	10.00
Fragrance, Dye, Preservative	q.s.
Water	87.56

**Blending Procedure:**

Combine SD40 alcohol and Pyrocid and mix until uniform and clear. Add alcohol/Pyrocid blend to Rhodapex MA 360, and mix until uniform. With smooth agitation, slowly add mixture to water. Add fragrance, dye and preservative.

**Active Ingredients:**

Pyrethrins:	0.040%
Piperonylbutoxide, tech:*	0.080%
N-octyl bicyclheptene dicarboximide:	0.032%
Petroleum distillates:	0.189%

\* Equivalent to 0.064% (butylcarbityl) (6-propylpiperonyl) ether and 0.016% related compounds.

**SOURCE:** Rhone-Poulenc Surfactants & Specialties: Formulas

### Skin Conditioning Body Shampoo (cold process)

<u>Ingredients:</u>	<u>%w/w</u>
Tetrasodium EDTA	0.10
Water	40.75
Ammonium Laureth Sulfate-2 m. E.O.	25.00
Ammonium Lauryl Sulfate	20.00
Cocamidopropyl Betaine (Tego Betaine F 50)	5.00
PEG-7 Glyceryl Cocoate (Tegosoft GC)	2.50
PEG-30 Glyceryl Laurate (Tagat L)	1.00
Dimethicone Copolyol (Abil B 8852)	0.50
Water (and) Ethoxydiglycol (and) Propylene Glycol (and) Butylene Glycol (and) Matricaria Extract (and) Sage Extract (and) Yarrow Extract (and) Balm Mint Extract (and) Rosemary Extract (and) Restharrow Extract (and) Coltsfoot Extract (and) Wild Thyme Extract (and) Horsetail Extract (and) Fructose (and) Althea Extract (Extrapone 3 Special 2/789490 Dragoco)	0.15
Citric Acid (25% solution)	to pH 6
Preservatives	Q.S.
Fragrance	Q.S.
Cocamidopropyl Betaine (and) Glyceryl Laurate (Antil HS-60)	5.00
Ammonium Chloride (25% solution)	as needed

**Procedure:**

Add ingredients in order, mixing between additions. Adjust pH.  
Adjust viscosity.

### Body Building Conditioner

<u>Ingredients:</u>	<u>%w/w</u>
Water	90.10
Glyceryl Stearate S.E. (Tegin)	3.00
Glycol Stearate (EGMS-VA)	1.00
Cetyl Alcohol	2.00
Propylene Glycol	3.00
Quaternium-80 (Abil Quat 3272)	0.50
Dimethicone Copolyol (Abil B 8852)	0.40
Color, Preservatives, Fragrance	Q.S.

**Procedure:**

1. Heat the water to 70-75C. Disperse the Tegin, EGMS-VA, and Cetyl Alcohol. Mix well.
  2. Begin cooling. Cool to 45-50C while mixing. Mix the Propylene Glycol and the Abil Quat 3272 together and add to the batch. Mix.
  3. Switch to sweep mixer. Cool to 40-45C. Add the Abil B 8852, Color, Preservatives, and Fragrance. Mix.
  4. Continue cooling. Fill.
- Formula GCC 16-11

SOURCE: Goldschmidt Chemical Corp.: Suggested Formulations

Tooth Gel, Foaming, Transparent

	%W/W
I Water	6.0
Sodium hydroxide (10% solution)	0.2
II Dehydazol A400P	0.6
III Henkel Glycerin 86% DAB 9	66.0
IV Sident 12 DS	18.0
Aerosil 200	2.0
V Eumulgin SML 20	0.4
Eumulgin SMS 20	0.8
Toothpaste aroma	1.0
VI Texapon K12	1.0
Water	4.0

**Preparation:**

Sodium chloride is dissolved in water. Dehydazol A400P and glycerin are added and allowed to swell. Sident 12 DS and Aerosil 200 are added and stirred in until a homogeneous paste is created. The tooth paste aroma is solubilized in the emulsifier Eumulgin SML 20/SMS 20 in a separate vessel, and then added to the mixture. Texapon K12 and the water are stirred in carefully (to prevent foam formation). De-aeration takes place in a strong vacuum.

Formula No. K11-10

Tooth Gel, Foaming Transparent

	%W/W
I Water	6.0
Sodium hydroxide	0.2
II Dehydazol A400P	0.6
III Sorbitol (70%)	68.0
IV Sident 12 DS	16.0
Aerosil 200	2.0
V Eumulgin SML 20	0.4
Eumulgin SMS 20	0.8
Toothpaste aroma	1.0
VI Texapon K12	1.0
Water	3.5
Coloring agent E 131 1%	0.5

**Preparation:**

Dissolve the sodium hydroxide in water. Add sorbitol and allow to swell with Dehydazol A400P, stirring slowly. When swelling is complete (any lumps must be destroyed) add Sident 12 DS and Aerosil 200 and stir you have a homogeneous paste. The aroma is solubilized in Eumulgin SML 20/SMS 20 in a separate vessel before being added to the paste. The coloring agent and the Texapon K12 are dissolved in water and stirred in carefully (keep foam formation to a minimum). De-aerate for max. 1/2 hour in a strong vacuum. (Vacuum <650 Pa.)

Formula No. K11-11

SOURCE: Henkel KGaA: Cosmetic Model Formulae



**Toothpaste****Material/CTFA-Index:**

Tylose CB 200/Sodium Carboxymethyl Cellulose	1.20%
Water	31.80
HDK N 20 P/Silica	2.00
Glycerine	10.00
Sorbitol 70%ig/Sorbitol	10.00
Calcium Carbonate	40.00
Texapon K 1296/Sodium Lauryl Sulfate	5.00
Preservatives, flavours, pigments	q.s.

Disperse Tylose well in water and let swell. Add HDK and disperse well, mix in glycerine and Sorbitol. Stir in calcium carbonate. Add Texapon K 1296 carefully; avoid strong foaming. Evacuate the finished formulation for a short period.  
Formulation 250 AH

**Toothpaste, Transparent****Material/CTFA-Index:**

Tylose CB 200/Sodium Carboxymethyl Cellulose	0.50%
Water	19.00
Polyethylenglykol 400/PEG-8	4.30
Sorbitol 70%ig/Sorbitol	17.00
Glycerine	50.00
HDK N20P/Silica	5.70
Texapon K 1296/Sodium Lauryl Sulfate	2.50
Preservatives, flavours, pigments	q.s.

Add Tylose and HDK to the water whilst strring. Stir in PEG-8. Add Texapon K1296 carefully; avoid strong foaming. Evacuate the finished formulation for a short period.  
Formulation 252 AH

**Toothpaste****Material/CTFA-Index**

A: Water	37.60%
Tylose CB 200/Sodium Carboxymethyl Cellulose	1.30
B: HDK N 20P/Silica	3.20
C: Glycerine	15.00
D: Dentphos K/Dicalcium Phosphate Dihydrate	35.00
E: Medialan LD/Sodium Lauroyl Sarcosinate	6.60
Preservatives, flavours, pigments	q.s.

Disperse Tylose well in water and let swell. Mix in HDK and disperse well. Add C. Stir in D thoroughly. Mix in E slowly (avoid strong foaming).  
Formulation 271 AH

**SOURCE: Wacker Silicone: Suggested Formulations**

ToothpasteMaterial/CTFA-Index:

A: Water	43.14%
Tylose CB 200/Sodium Carboxymethyl Cellulose	1.00
HDK N 20P/Silica	3.00
B: Glycerine	8.00
C: Dentphos K/Dicalcium Phosphate Dihydrate	21.00
Phoskadent pyro/Tetrasodium Pyrophosphate	0.50
Sodium Chloride	15.00
D: Medialan LD/Sodium Lauroyl Sarcosinate	6.00
Preservatives, flavours, pigments	q.s.

Disperse Tylose well in water and let swell. Mix in HDK and disperse well. Add B. Stir in C thoroughly. Mix in D slowly (avoid strong foaming).

Formulation 270 AH

ToothpasteMaterial/CTFA-Index:

A: Water	32.20%
Tylose CB 200/Sodium Carboxymethyl Cellulose	1.00
B: HDK N20P/Silica	1.50
C: Glycerine	7.00
Sorbitol 70%ig	15.00
D: Calcium Carbonate	38.00
Hostapon KTW neu/Sodium Cocoyl Laurate	4.00
Preservatives, flavours, pigments	q.s.

Disperse Tylose well in water and let swell. Mix in HDK N20P and disperse well. Add C. Stir in D thoroughly.

Temperature stability: at 45C over 10 weeks.

Formulation 272 AH

SOURCE: Wacker Silicone: Suggested Formulations

**Toothpaste, Foaming**

	<u>%W/W</u>
I Chalk	32.0
Paraffin oil	2.0
Henkel Glycerin 86% DAB 9	20.0
Toothpaste aroma	1.0
II Texamid 578	1.5
Water	36.0
III 1% Saccharin solution	2.5
IV Texapon K12	1.0
Water	4.0

Formula preserved with 0.5-1% sodium benzoate

**Preparation:**

Mix I to a paste, swell II, mix with III and add to I. Dissolve IV, heating slightly if necessary and carefully stir it into I. If the finished paste has a smooth structure, it is rolled once and then stirred in a vacuum kneader until an airfree paste is obtained.

Formula No. K11-01

**Toothpaste, Foaming**

	<u>%W/W</u>
I Dicalcium phosphate	47.5
Henkel Glycerin 86% DAB 9	30.0
Toothpaste aroma	1.0
II Dehydazol A400P	1.2
Water	12.7
III 1% Saccharin solution	2.5
IV Texapon K12	1.0
Water	4.1

Formula preserved with 0.5-1% sodium benzoate

**Preparation:**

Mix I to a paste, swell II, mix with III and add to I. Dissolve IV, heating slightly and slowly stir it into the mixture. If the finished paste has a smooth structure, it is rolled and then stirred in a vacuum kneader until an airfree paste is obtained.

Formula No. K11-02

**SOURCE:** Henkel KGaA: Cosmetic Model Formulae

Toothpaste, Foaming, with Aerosil 200

	<u>%W/W</u>
I Chalk	30.0
Aerosil 200	2.0
Henkel Glycerin 86% DAB 9	20.0
Paraffin oil	2.0
II Toothpaste aroma	1.0
Menthol	0.2
III Dehydazol A400P	1.0
Water	30.0
IV 1% Saccharin solution	2.5
V Texapon K12	1.8
Water	9.5

**Preparation:**

Mix I to a paste, dissolve II and add to I. Swell III, mix with IV and add to I. Dissolve V, heating slightly, and carefully stir it into the mixture. If the finished paste has a smooth structure, it is rolled and then stirred in a vacuum kneader until an airfree toothpaste is obtained.

Formula No. K11-03

Toothpaste, Foaming, with Aerosil 200

	<u>%W/W</u>
I Chalk	30.0
Aerosil 200	3.5
Henkel Glycerin 86% DAB 9	20.0
Toothpaste aroma	1.0
II 1% Saccharin solution	5.0
III Dehydazol A400P	1.0
Water	30.0
IV Texapon K12	1.0
Water	8.5

**Procedure:**

Mix I to a paste, swell III, mix with II and add to I. Dissolve IV, heating slightly, and carefully stir it into the mixture. If the finished paste has a smooth structure, the paste is rolled once and then de-aerated in a vacuum kneader.

Formula No. K11-04

SOURCE: Henkel KGaA: Cosmetic Model Formulae

**Water-Resistant Sport Tint**

Veegum Ultra, and Rhodigel provide emulsion stabilization, viscosity enhancement, and pigment suspension in this luxurious, water-resistant, cold processed, liquid makeup. A dual sunscreen system (octyl methoxycinnamate and titanium dioxide) provides protection from UV radiation for the active sportswoman.

<u>Ingredient:</u>	<u>% by Wt.*</u>
A: Veegum Ultra (Magnesium Aluminum Silicate)	1.60
Rhodigel (Xanthan Gum)	0.40
Deionized Water	70.40
Propylene Glycol	5.00
B: Iron Oxides	0.67
Manganese Violet	0.10
Talc	4.27
Titanium Dioxide	6.96
C: Isocetyl Alcohol	3.00
Octyl Methoxycinnamate	3.00
Mineral Oil (and) Lanolin Alcohol**	2.00
Oleth-3 Phosphate***	2.20
D: PVP****	0.40
Preservative, Fragrance	q.s.

\* As Received Basis

\*\* Ritachol, R.I.T.A. Corp.

\*\*\* Crodafos N-3 Neutral

\*\*\*\* PVP K-90

**Procedure:**

Dry blend Veegum Ultra and Rhodigel and add to the water while mixing with a high speed disperser at 1700 rpm for 25 minutes. Adjust mixer to 850 rpm and add the propylene glycol. Blend B ingredients thoroughly and grind if necessary. Slowly add B to A until all is added, mixing until smooth and uniform. Mix together C ingredients with a propeller stirrer. Add C to (A and B) and mix until homogeneous. Add D ingredients in order, mixing until smooth and uniform.

**Product Characteristics:**

Viscosity: 1800-2400 cps\*\*\*\*\*

pH: 6.1+-0.2

\*\*\*\*\*Measured after 28 days aging at room temperature using Brookfield Viscometer, Model LV, Spindle #4 at 60 rpm.

SOURCE: R.T. Vanderbilt Co., Inc.: Formula No. 453

**Section XIV**  
**Trade-Named**  
**Raw Materials**

RAW MATERIALS	CHEMICAL DESCRIPTION	SOURCE
Abil AV-20	Phenyl trimethicone	Goldschmidt
Abil AV-20HS	Phenyl trimethicone	Goldschmidt
Abil B 8851	Dimethicone copolyol	Goldschmidt
Abil B 8852	Dimethicone copolyol	Goldschmidt
Abil B 9950	Dimethicone propyl PG-betaine	Goldschmidt
Abil B 88183	Dimethicone copolyol	Goldschmidt
Abil EM-90	Cetyl dimethicone copolyol	Goldschmidt
Abil Quat 3272	Quaternium-80	Goldschmidt
Abil S 201	Dimethicone/sodium poly PG-propyl dimethicone thio-sulfate copolymer	Goldschmidt
Abil Wax 2440	Behenoxy dimethicone	Goldschmidt
Abil Wax 9800	Stearyl dimethicone	Goldschmidt
Abil Wax 9801	Cetyl dimethicone	Goldschmidt
Abil Wax 9810	C24-28 alkyl methicone	Goldschmidt
Abil Wax 9814	Cetyl dimethicone	Goldschmidt
Acetulan	Cetyl acetate (and) acetylated lanolin alcohol	Amerchol
Acritamer 934	Carbomer 934	Rita
Acritamer 940	Carbomer 940	Rita
Acritamer 941	Carbomer 941	Rita
Acuscrub 50		Allied-
Acylglutamate CT-12	2-Alkyl-N-carboxymethyl-N-hydroxyethylimidazolinium betaine	Ajinomoto
Acylglutamate HS-11	Surfactant	Ajinomoto

RAW MATERIALS	CHEMICAL DESCRIPTION	SOURCE
Acudyne 255		
Adol 66	Isostearyl alcohol	Sherex
Advantage CP Resin	Copolymer	ISP
Advantage V Resin	VA/butyl maleate/isobornyl acrylate copolymer	ISP
Aethoxal B	PPG-5 Laureth-5	
Ajidew N-50	Sodium PCA	Ajinomoto
Ajidew T-50	Sodium PCA	Ajinomoto
Alcolec S	Lecithin	Amer Lecith
Alkamide C-212		Rhone
Alkamide DC-207/S, DC-212/S, DC-207/S, DC-280/S, LE		Rhone
Alkamuls EGDS, EGMS, EGMS/C, GMS, GMS-165, LVL, MM/M, SPS, SS		Rhone
Aloe Vera Gel Decolorized 1X		Terry
Alpine 165-049	Fragrance	
Amerchol H-9	Sterol emulsifier & stabilizer	Amerchol
Amerchol L-101	Mineral oil (and) lanolin alcohol	Amerchol
Amerlate W	Isopropyl lanolate	Amerchol
Amerlate LFA	Lanolin fatty acids	Amerchol
Amerlate P	Isopropyl lanolate	Amerchol
Ameroxol OE-20	Oleth-20	Amerchol
Amerscreen P-80/20	Ethyl dihydroxypropyl PABA (and) propylene glycol	Amerchol
Amersil DMC-357	Dimethicone copolyol	Amerchol
Amihope LL	Lauroyl lysine	Ajinomoto



RAW MATERIALS	CHEMICAL DESCRIPTION	SOURCE
Amino-Collagen 25	Collagen amino acids	Maybrook
Amino-Silk SF	Silk amino acids	Maybrook
Amisoft CS-11	Sodium cocoyl glutamate	Ajinomoto
Amisoft CT-12	TEA cocoyl glutamate	Ajinomoto
Amisoft GS-11	Sodium N-cocoyl, Tallow-L-Glutamate	Ajinomoto
Amisoft HS-11	Sodium hydrogenated tallow glutamate	Ajinomoto
Amisoft LS-11	Sodium lauroyl glutamate	Ajinomoto
AMiter L-GOD/L-GOD2	Dioctyldodecyl lauroyl glutamate	Ajinomoto
AMiter LGS-2/LGS-5	Disteareth-5 lauroyl glutamate	Ajinomoto
Ammonyx CDO	Cocamidopropyl oxide	Stepan
Ammonyx KP	Amino oxide	Stepan
Ammonyx 4	Stearalkonium chloride	Stepan
AMP-95	Aminomethyl propanol (95%)	Angus
AMP-Regular	Aminomethyl propanol	Angus
Amphisol	DEA-Cetyl phosphate	Givaudan
Amphomer	Copolymer	Nat Starch
Amphomer LV-71	Copolymer	Nat Starch
Amphomer 28-4910	Copolymer	Nat Starch
Amphocerin E	Mixture of fatty alcohol and wax esters	Henkel
Amphocerin K	Mixture of fatty alcohol, wax esters and mineral fats	Henkel
Amphosol CA	Cocamidopropyl betaine	Stepan

RAW MATERIALS	CHEMICAL DESCRIPTION	SOURCE
Antifoam AF Emulsion	Dimethicone	DowCorning
Antil HS-60	Cocamidopropyl betaine (and) glyceryl laurate	Goldschmidt
Antil 141B	PEG-55 propylene glycol oleate	Goldschmidt
Antil 171	PEG-18 glyceryl oleate/cocoate	Goldschmidt
Antil 208	Acrylates/copolymer/glycol	Goldschmidt
Aquamollin BC	EDTA-sodium salt	Hoechst
Aqua-Tein C	Amino acids/acetamide MEA/ propylene glycol	Maybrook
Aqua-Tein S	Acetamide MEA/MEA-hydrolyzed silk/propylene glycol	Maybrook
Arlacel C		ICI
Arlacel 60	Sorbitan stearate	ICI
Arlacel 80	Sorbitan oleate	ICI
Arlacel 165	Glyceryl stearate/PEG-100 stearate	ICI
Arlacel 186	Glyceryl oleate/propylene glycol	ICI
Arlacel 989	PEG-7 hydrogenated castor oil	ICI
Arlamol E & EP	PPG-15 stearyl ether	
Armeen DM-18D	Dimethyl stearamine	Akzo
Arosurf TA-100	Distearyl dimonium chloride	Sherex
Arosurf 66-E2	Surfactant	Sherex
Avicel RC 591	Microcrystalline cellulose	FMC

RAW MATERIALS	CHEMICAL DESCRIPTION	SOURCE
Barquat CT-429	Cetrimonium chloride	Lonza
Belsil ADM 6041 E	Amodimethicone/emulsifier	Wacker
Belsil ADM 6042 E	Amodimethicone/emulsifier	Wacker
Belsil ADM 6056 E	Dimethicone/amodimethicone/ nonoxynol-4/nonoxynol-14	Wacker
Belsil ADM 6057 E	Amodimethicone/tallowtrimonium chloride/nonoxnol-10	Wacker
Belsil BNP	Boron nitride	Wacker
Belsil CM 020/CM 025/ CM 030/CM 040	Cyclomethicone	Wacker
Belsil CM 1000	Cyclomethicone/Dimethiconol	Wacker
Belsil DM 0.65/DM 35/ DM 100/DM 350	Dimethicone	Wacker
Belsil DM 6600 E	Dimethicone/Trideceth-10	Wacker
Belsil DM 10000	Dimethicone	Wacker
Belsil DMC 6031	Dimethicone copolyol	Wacker
Belsil DMC 6032	Dimethicone copolyol acetate	Wacker
Belsil DMC 6033	Dimethicone copolyol acetate	Wacker
Belsil DMC 6035	Methicone copolyol acetate	Wacker
Belsil DMC 6038	Dimethicone copolyol	Wacker
Belsil PDM 20/PDM 200 PDM 1000	Phenyl dimethicone	Wacker
Belsil SDM 6022	Dimethicone/stearoxy dimethyl- silane/stearoxy dimethyldisiloxane	Wacker
Belsil SM 6018	Stearyl methicone	Wacker
Belsil 350	Dimethicone	Wacker
Benece1 MP943PR	Hydroxypropyl methylcellulose	Aqualon

RAW MATERIALS	CHEMICAL DESCRIPTION	SOURCE
Bentone EW & 38	Gelling & suspending agent	Rheox
Bernel Ester DOM	Diethyl maleate	Bernel
Bienwachs 8100	Beeswax	Henkel
Biocare SA	Albumen/hyaluronic acid/dextran sulfate	
Biomim Se/P/C	Selenium polypeptides	Brooks
Bioterge AS-40	Sodium C16-18 olefin sulfonate	Stepan
Brij 96	Oleth-10	ICI
Britol 7	Mineral oil	Sonneborn
Bronidex L & L5	5-bromo-5-nitro-1,3-dioxane	Henkel
Bronopol	Bactericide	Angus
Brookswax D	Cetearyl alcohol/ceteareth-20	Brooks
Burst RSD-10	Dimethicone silylate	Hydrolabs
C33-134 Cosmetic Black Iron oxide		Sun
C43-1810 Cosmetic Blue Ultramarines		Sun
C47-5175 Cosmetic White Titanium dioxide		Sun
CAE	PCA ethyl cocoyl arginate	Ajinomoto
Camilol	Alpha-bisabolol	Maybrook
Capmul 10G-10-0	Polglyceryl-10 decaoleate	Capital
Captex 300	Capric/caprylic triglycerides	Capital
Carbopol 934	Carbomer 934	Goodrich
Carbopol 940	Carbomer 940	Goodrich
Carbopol 941	Carbomer 941	Goodrich

RAW MATERIALS	CHEMICAL DESCRIPTION	SOURCE
Carbopol 954	Carbomer 954	Goodrich
Carbopol 980	Carbomer 980	Goodrich
Carbopol 981	Carbomer 981	Goodrich
Carbopol 1342	Carbomer 1342	Goodrich
Carbopol 1382	Carbomer 1382	Goodrich
Carbopol 2984	Carbomer 2984	Goodrich
Carbopol 5984	Carbomer 5984	Goodrich
Carbowax 200		UnionCarb
Carbowax 400	PEG-8	UnionCarb
Carnation	Mineral oil	Sonneborn
Carsamide SAL-7	Lauramide DEA	
Carsonol ALS	Ammonium lauryl sulfate	
Carsoquat CT 429	Cetrimonium chloride	Lonza
Cashmir K-11	Mica/silicon dioxide	
C-Base	Mineral oil/PEG-30 lanolin/ cetyl alcohol	Maybrook
Cegesoft C24	2-Ethylhexyl palmitate	Henkel
Cegesoft 17	Myristyl lactate	Henkel
Cellosize QP	Hydroxyethyl cellulose	UnionCarb
Cellosize 30,000H	Hydroxyethyl cellulose	UnionCarb
Celquat H-100 & L-200	Polyquaternium-4	Nat Starch
Ceraphyl 60	Quaternium-22	Van Dyk
Ceraphyl 65	Quaternium-26	Van Dyk
Ceraphyl 140	Decyl oleate	Van Dyk
Ceraphyl 424	Myristyl myristate	Van Dyk

RAW MATERIALS	CHEMICAL DESCRIPTION	SOURCE
Ceraphyl 847	Octyldodecyl stearoyl stearate	Van Dyk
Cerasynt GMS	Glyceryl stearate	Van Dyk
Cerasynt IP	Glycol stearate SE	Van Dyk
Cerasynt SD	Glyceryl stearate, pure	Van Dyk
Cerasynt WM	Glyceryl stearate/stearyl alcohol/sodium lauryl sulfate	Van Dyk
Cetal	Cetyl alcohol	Amerchol
Cetiol	Oleyl oleate	Henkel
Cetiol A	Hexyl laurate	Henkel
Cetiol B	Dibutyl adipate	Henkel
Cetiol HE	PEG-7 glyceryl cocoate	Henkel
Cetiol J600	Oleyl erucate	Henkel
Cetiol LC	Coco-caprylate/caprate	Henkel
Cetiol MM	Myristyl myristate	Henkel
Cetiol R	Soya polyol	Henkel
Cetiol S	Diethylcyclohexane	Henkel
Cetiol SB45	Shea butter	Henkel
Cetiol SN	Cetearyl alcohol isononanoate	Henkel
Cetiol V	Decyl oleate	Henkel
Cetiol 868	Isooctyl stearate	Henkel
Chel CD	Cyclohexane diamine tetra-acetic acid	Ciba-Geigy
Citroflex-2	Triethyl citrate	Morflex
Clearlan	Lanolin	Henkel
CMC 7HSSF	Cellulose gum	Aqualon

RAW MATERIALS	CHEMICAL DESCRIPTION	SOURCE
CMC 7LF/CMC 7MF	Cellulose gum	Aqualon
Co-Gell A-2/B270		
Collagen Hydrolyzate Cosmetic N-55		Maybrook
Collagen Hydrolyzate Cosmetic 50		Maybrook
Collagen KD		GfN
Collagen Native Extra 1%		Maybrook
Comperlan COD	Cocamide DEA	Henkel
Comperlan F	Linoleamide DEA	Henkel
Comperlan HS	Stearamide MEA	Henkel
Comperlan KD	Cocamide DEA	Henkel
Comperlan KM	Cocamide MEA	Henkel
Comperlan LD	Lauramide DEA	Henkel
Comperlan LM	Lauramide MEA	Henkel
Comperlan LMD	Lauramide DEA	Henkel
Comperlan LP	Lauramide MIPA	Henkel
Comperlan LS	Cocamide DEA/Laureth-2	Henkel
Comperlan OD	Oleamide DEA	Henkel
Comperlan UDM	X Undecylenamide MEA	Henkel
Comperlan VOD	Soyamide DEA	Henkel
Comperlan 100	Cocamide MEA	Henkel
Cosmedia Guar C261	Guar hydroxypropyl trimonium chloride	Henkel
Cosmedia Guar U	Guar gum	Henkel
Cosmedia Polymer HSP 1180	Polyacrylamidomethylpropane sulfonic acid	Henkel

RAW MATERIALS	CHEMICAL DESCRIPTION	SOURCE
Cosmowax K	Stearyl alcohol/ceteareth-20	Croda
Cremophor A25	Surfactant	BASF
Cremophor RD 40	Surfactant	BASF
Cremophor RH 40	PEG-40 Hydrogenated castor oil	BASF
Cremophor RH 60	PEG-60 Hydrogenated castor oil	BASF
Crodafos N-3 Neutral	DEA-Oleth-3 phosphate	Croda
Crodafos SG	PPG-5-ceteth 10	Croda
Crodamol PMP	PPG-2-myristyl ether propionate	Croda
Crodamol PTC	Pentaerythrityl tetracaprate	Croda
Crodawax GP 200	Stearylalcohol/PEG Stearate	Croda
Crodesta SL 40	Sucrose cocoate	Croda
Cropeptide W		Croda
Crotein ADW	AMP Isostearyl hydrolyzed wheat protein	Croda
Crotein Q	Steartrimonium hydroxyethyl hydrolyzed collagen	Croda
Crotein SPO	Hydrolyzed animal protein	Croda
Crovol A-70	PEG-60 almond glycerides	Croda
Crovol M40	Corn oil PEG-20 complex	Croda
Cutina AGS	Glycol distearate	Henkel
Cutina BW	Partial glycerides/esters of long chain fatty acids	Henkel
Cutina CBS	Mixture	Henkel
Cutina CP/CP-A	Cetyl palmitate	Henkel
Cutina E24	PEG-20-glyceryl stearate	Henkel
Cutina EGMS	Glycol stearate	Henkel



RAW MATERIALS	CHEMICAL DESCRIPTION	SOURCE
Cutina GMS	Glyceryl stearate	Henkel
Cutina HR	Hydrogenated castor oil	Henkel
Cutina KD16	Glyceryl stearate SE	Henkel
Cutina LE	Glyceryl stearate/sodium cetearyl sulfate	Henkel
Cutina LM	Mixture of fatty alcohols, waxes, oils	Henkel
Cutina MD/MD-A	Glyceryl stearate	Henkel
Cutina TS	PEG-3-distearate	Henkel
Darvan No. 1	Sodium polynaphthalene sul- fonate	Vanderbilt
DC3225C	Cyclomethicone/dimethicone copolyol	DowCorning
Dehydazol-types	Cellulose gum	Henkel
Dehydol LS2 Deo	Laureth-2	Henkel
Dehydol LS3 Deo	Laureth-3	Henkel
Dehydol LS4 Deo	Laureth-4	Henkel
Dehymuls E	Mixed ester emulsifier	Henkel
Dehymuls F	Mixture of fatty acid esters, fatty acid salts & additives	Henkel
Dehymuls HRE-7		Henkel
Dehymuls K	Mixture	Henkel
Dehymuls LS	Mixture	Henkel
Dehymuls SML	Sorbitan monolaurate	Henkel
Dehymuls SMO	Sorbitan monooleate	Henkel
Dehymuls SMS	Sorbitan monostearate	Henkel

RAW MATERIALS	CHEMICAL DESCRIPTION	SOURCE
Dehymuls SSO	Sorbitan sesquioleate	Henkel
Dehyquart A	Cetrimonium chloride	Henkel
Dehyquart C cryst.	Laurylpyridinium chloride	Henkel
Dehyquart DAM	Distearyltrimonium chloride	Henkel
Dehyquart E	Hydroxycetyl hydroxyethyl dimonium chloride	Henkel
Dehyquart LDB	Lauralkonium chloride	Henkel
Dehyquart LT	Lauryl trimethyl ammonium chloride	Henkel
Dehyquart SP	Quaternium-52	Henkel
Dehyton AB30	Coco-betaine	Henkel
Dehyton G	Cocoamphodiacetate	Henkel
Dehyton G-SF	Cocoamphodipropionate	Henkel
Dehyton K	Cocamidopropyl betaine	Henkel
Dentphos K	Dicalcium phosphate dihydrate	
Dermalcare DV-4232, GMS/SE, NI		
Dermasome E	Lecithin/tocopheryl acetate	ChemMark
Dermasome SOD	Lecithin/superoxide dimutase	ChemMark
Desaron	Desamido collagen/hyaluronic acid	GfN
Diahold A-503	AMP-Acrylates copolymer	Sandoz
Dimethicone Copolyol Resin Modifier		UnionCarb
Dimethicone 350		GE Sil
Dimethicone Copolyol Surfactant		UnionCarb
DME	Dimethyl ester	duPont
Dow 225 Fluid	Dimethicone	DowCorn

RAW MATERIALS	CHEMICAL DESCRIPTION	SOURCE
Dowanol DPM	PPG-2 Methyl ether	Dow
Dowanol EPh	Phenoxyethanol	Dow
Dow Corning Q2-3225C, Q2-5220	Cyclomethicone/dimethicone copolymer	DowCorn
Dow Corning 190/193	Dimethicone copolymer	DowCorn
Dow Corning 200 Fluid	Dimethicone	DowCorn
Dow Corning 245 Fluid 345 Fluid/344 Fluid	Cyclomethicone	DowCorn
Dow Corning 556 Fluid	Phenyltrimethicone	DowCorn
Dow Corning 593	Dimethicone/trimethylsiloxy- silicate	DowCorn
Dow Corning 929	Emulsion	DowCorn
DC-1932 Surfactant		DowCorn
Dowicil 200	Quaternium-15	Dow
D-Panthenol 50P	Panthenol/propylene glycol	BASF
Drakeol 7/9/10/19	Mineral oil	Penreco
DV-3284	Sodium isethionate	
Dymel A	Dimethyl ether	duPont
Eastman AQ Treated Pigment-Red, Yellow, Black, White		Eastman
Eastman AQ 38S Polymer/AQ 55S Polymer		Eastman
Eastman Vitamin E6-81	Vitamin E acetate	Eastman
Eastman Vitamin E TPGS (20%)		Eastman
Egalia No. 72075	Perfume	
EGMS-VA	Glycol stearate	Goldschmidt

RAW MATERIALS	CHEMICAL DESCRIPTION	SOURCE
Elastin CLR	Hydrolyzed animal elastin	Henkel
Eldew CL-301	Cholesteryl/Behenyl/octyl-dodecyl/lauroyl glutamate	Ajinomoto
Elefac I-205	Octyldodecyl neopentanoate	Bernel
Emalex CC-168	Cetyl octanoate	Nihon
Emalex GIWS330	POE (30) glyceryl triiso-stearate	Ajinomoto
Emalex GMS-7CAE	Glyceryl monostearate	Nihon
Emalex GMS-45RT	Glyceryl monostearate (HLB5)	Nihon
Emalex S.T.G.-R	Hydrogenated oil	Nihon
Emalex 6300-DI ST	PEG-150 Distearate	Nihon
Emalex 6300 M-ST	PEG-150 monostearate	Nihon
Emcol CC-9	Surfactant	Witco
Emcol 4161L	Disodium cocamido MIPA-sulfo-succinate	Witco
Emersol 132	Stearic acid XXX	Henkel
Emersol 871	Isostearic acid	Henkel
Emeressence 1160	Phenoxyethanol	Henkel
Emulgade 1000 Ni	Cetearyl alcohol/ceteareth-20	Henkel
Emulgade A	Cetearyl alcohol/laureth-10	Henkel
Emulgade CL/CL Spec	Mixture	Henkel
Emulgade F	Mixture	Henkel
Emulgade F Special	Cetearyl alcohol/PEG-40 Castor oil	Henkel
Emulgade K	Mixture	Henkel
Emulgade SE, B3		Henkel

RAW MATERIALS	CHEMICAL DESCRIPTION	SOURCE
Emulgator E2149	Stearyl alcohol/steareth-7	Goldschmidt
Emulgator E2155	Stearyl alcohol/steareth-7/ steareth-10	Goldschmidt
Epolene N-34	Polyethylene wax	Eastman
Escalol 507	Octyl dimethyl PABA	Van Dyk
Escalol 567	Benzophenone-3	Van Dyk
Ethanol DEB 100		
Ethomeeen C-25	PEG-15 cocamine	Akzo
Eumulgin B1	Ceteareth-12	Henkel
Eumulgin B2	Ceteareth-20	Henkel
Eumulgin B3	Ceteareth-30	Henkel
Eumulgin C4	PEG-5-Cocamide	Henkel
Eumulgin HRE 40	PEG-40 hydrogenated castor oil	Henkel
Eumulgin HRE 60	PEG-60 hydrogenated castor oil	Henkel
Eumulgin L	PPG-2-ceteareth-9	Henkel
Eumulgin M8	Oleth-10/oleth-5	Henkel
Eumulgin O5	Oleth-5	Henkel
Eumulgin O10	Oleth-10	Henkel
Eumulgin RO40	PEG-40 castor oil	Henkel
Eumulgin SML 20	Polysorbate 20	Henkel
Eumulgin SMO 20	Polysorbate 80	Henkel
Eumulgin SMS 20	Polysorbate 60	Henkel
Eumulgin 286	Nonoxynol-10	Henkel
Euperlan MPK 850	Mixture	Henkel
Euperlan PK 771	Pearly gloss concentrate	Henkel

RAW MATERIALS	CHEMICAL DESCRIPTION	SOURCE
Euperlan PK 776/ PK 789/PK 810/PK 900/PK 3000	Pearly gloss concentrate	Henkel
European Elastin-30	Hydrolyzed elastin	Maybrook
Eusolex 4360	Benzophenone-3	EM Indust
Eusolex 6300	Methylbenzylidene camphor	EM Indust
Eusolex 8020		EM Indust
Eutanol G, G16	Octyl dodecanol	Henkel
Eutanol G318		Henkel
Extrapone 3 Special 2/789490 Dragoco Complex		Goldschmidt
Extrapon 5 Special		Goldschmidt
Finsolv SB	Isostearyl benzoate	Finetex
Finsolv TN	C12-15 alkyl benzoate	Finetex
Fitoderm	Squalane	Centerchem
Flexan 130	Sodium polystyrene sulfate	Nat Starch
Forlanit E	Hydroxycetyl phosphate	Henkel
Gafquat HS-100	Polyquaternium-28	ISP
Gafquat 734/755	Cationic copolymer	ISP
Gafquat 755N	Poyquaternium-11	ISP
Gantrez A-425		ISP
Gantrez ES-225	Ethyl ester of PVM/MA	ISP
Gantrez ES425	PVM/MA copolymer	ISP

RAW MATERIALS	CHEMICAL DESCRIPTION	SOURCE
Gantrez V-215 Resin	Monoethyl ester	ISP
Gantrez V-225 Resin	Ethyl ester of PVM/MA copolymer	ISP
Gantrez V-425 Resin	Butyl ester of PVM/MA copolymer	ISP
Gantrez XL-80	PVM/MA decadiene crosspolymer	ISP
Geahlene	Complex	
Gelamide 250F	Polyacrylamide (milled)	Am Cyan
Gelco	Gelatin	Maybrook
Gelita Sol C	Hydrolyzed collagen	Dt. gel
Genagen CA-050	PEG-5 cocamide	Hoechst
Genagen CAB	Cocamidopropyl betaine	Hoechst
Genamin CTAC	Cetrimonium chloride	Hoechst
Genamin DSAC	Distearyldimonium chloride	Hoechst
Genapol AMG	Magnesium-PEG-3 Cocamidosulfate	Hoechst
Genapol CRT 40	DEA lauryl sulphate	Hoechst
Genapol L-3	Laureth-3	Hoechst
Genapol LRO liquid	Sodium laureth sulfate	Hoechst
Genapol PGL	Glycol distearate/Cocamide MEA/ PPG-4-Deceth-4	Hoschst
Genapol PGM liquid	Sodium laureth sulfate/glycol distearate/cocamide MEA	Hoechst
Genapol PMS	Glycol distearate	Hoechst
Genapol SBE	Disodium laureth sulfosuccinate	Hoechst
Genapol TS powder	PEG-3 distearate	Hoechst
Genapol TSM	PEG-3 distearate/sodium laureth sulfate	Hoechst

RAW MATERIALS	CHEMICAL DESCRIPTION	SOURCE
Genapol UD-030	Undeceth-3	Hoechst
Genapol ZRO liquid	Sodium laureth sulfate	Hoechst
Genapol 122	Soya sterol	Henkel
Generol 122E5	PEG5 soya sterol	Henkel
Generol 122E10	PEG-10-soya sterol	Henkel
Generol 122E16	PEG-16-soya sterol	Henkel
Generol 122E25	PEG-25-soya sterol	Henkel
Germaben II/IIIE	Bactericide/fungicide	Sutton
Germall II	Diazolidinyl urea	Sutton
Germall 115	Imidazolidinyl urea	Sutton
Geropon AC-78/NP & AS-200 & SBR-3 & T-77		
Glucam E-20	Methyl gluceth-20	Amerchol
Glucamate DOE 120	PEG-120 methyl glucose dioleate	Amerchol
Glucamate SSE-20	PEG-20 methyl glucose sesqui- stearate	Amerchol
Glucate DO	Methyl glucose dioleate	Amerchol
Glucate SS	Methyl glucose sesquistearate	Amerchol
Glydant	DMDM hydantoin	Lonza
Grillocoase PS	Methyl glucose sesquistearate	Rita
Grilloten LSE 65K	Sucrose cocoate	Rita
Grilloten LSE 87K	Sucrose cocoate	Rita
Grilloten PSE 141G	Sucrose cocoate	Rita



RAW MATERIALS	CHEMICAL DESCRIPTION	SOURCE
Hamp-ene Na2	Disodium EDTA	WRGrace
Hamp-ene 220	Tetrasodium EDTA	WRGrace
Hamosyl L-30	Fatty acid sarcosinate	WRGrace
HD-Eutanol	Oleyl alcohol	Henkel
HDK H15/HDK H20/ HDK N20/HDK N20P	Silica	Wacker
Hest CSO	Cetearyl octanoate	Heterene
Hest E.G.D.S.	EGDS	Heterene
Hest G-7-TO	Glycereth-7 trioctanoate	Heterene
Hest GC-7	PEG-7 Glyceryl cocoate	Heterene
Hest IS-2-0	Isosteareth-2 octanoate	Heterene
Hest L-2-0	Laureth-2 octanoate	Heterene
Hest MS	Myristyl stearate	Heterene
Hetaine CLA	Canolamidopropyl betaine	Heterene
Hetamide MA	Acetamide MEA	Heterene
Hetamide RC	Cocamide DEA	Heterene
Hetan SS	Sorbitan stearate	Heterene
Hetester HCA	Glyceryl triacetyl hydroxy- stearate	Heterene
Hetester HCP	PPG-3 hydrogenated castor oil	Heterene
Hetester PHA	Propylene glycol isoceteth-3 acetate	Heterene
Hetester PMA	Propylene glycol myristyl ether acetate	Heterene
Hetlan AC	Acetylated lanolin	Heterene
Hetol CA	Cetyl alcohol	Heterene

RAW MATERIALS	CHEMICAL DESCRIPTION	SOURCE
Hetol CS	Cetearyl alcohol	Heterene
Hetoxmate SA-40	PEG-40 stearate	Heterene
Hetoxamate SA-100	PEG-100 stearate	Heterene
Hetoxamate 100S	PEG-100 stearate	Heterene
Hetoxide G-7	Glycereth-7	Heterene
Hetoxide G-26	Glycereth-26	Heterene
Hetoxol D	Cetearyl alcohol/ceteareth-20	Heterene
Hetoxol G	Stearyl alcohol/ceteareth-20	Heterene
Hetoxol L-2	Laureth-12	Heterene
Hetoxol L-4	Laureth-4	Heterene
Hetoxol P	Emulsifying wax	Heterene
Hetsorb L-20	Polysorbate 20	Heterene
Hetsorb L-80	PEG-80 sorbitan laurate	Heterene
Hi-Care 1000		
Hoe S3267	Cocamidopropyl betaine	
Hostacerin CG	Blend	Hoechst
Hostacerin DGI	Polyglyceryl-2 sesquiiso- stearate	Hoechst
Hostacerin DGL	Polyglyceryl-2 PEG-4 laurate	Hoechst
Hostacerin DGMS	Polyglyceryl-2-stearate	Hoechst
Hostacerin DGS	Polyglyceryl-2 PEG-4 stearate	Hoechst
Hostacerin KW340N	Triceteareth-4 phosphate	Hoechst
Hostacerin LSE	Sucrose laurate	Hoechst
Hostacerin PN 73	Acrylamide/sodium acrylate	Hoechst
Hostacerin WO	Mixture	Hoechst

RAW MATERIALS	CHEMICAL DESCRIPTION	SOURCE
Hostacerin WOL	Blend	Hoechst
Hostaphat KL340N	Trilaureth-4 phosphate	Hoechst
Hostaphat KW340N	Triceteareth-4 phosphate	Hoechst
Hostapon CT paste	Sodium methyl cocoyl taurate	Hoechst
Hostapon KTW	Sodium lauroyl taurate	Hoechst
Hostapon KTW neu	Sodium cocoyl laurate	Hoechst
Hostapon KCG	Sodium cocoyl glutamate	Hoechst
Hostapon LEC	Laureth-3 carboxylic acid	Hoechst
Hostapon SCHC	Sodium cocoyl hydrolyzed collagen	Hoechst
Hostapon SCI	Sodium cocoyl isethionate	Hoechst
Hostapon SCI D	Sodium cocoyl isethionate	Hoechst
Hostapur SAS 60	Sodium C14-17 sec. alkyl sulfonate	Hoechst
Hydagen CAT		Henkel
Hydagen DEO	Triethyl citrate/BHT	Henkel
Hydagen P	Diethylene tricaseinamide	Henkel
Hydrotriticum QL/2000	Hydrolyzed whole wheat protein	
Hygroderm	"Moisturizing"-Factor	Novarome
Hystar CG	Hydrogenated starch hydrolysate	Lonza
Hystrene 7018	Fatty acids	Witco

RAW MATERIALS	CHEMICAL DESCRIPTION	SOURCE
Igepal CO-630	Nonionic surfactant	Rhone-Poul
Incroquat Behenyl TMS	Behentrimonium methosulfate/ cetearyl alcohol	Croda
Isolan GI34	Polyglyceryl-4 isostearate	Goldschmidt
Ivarlan AWS	PPG-12 PEG-65 lanolin oil	Brooks
#IY-67 Fragrance		Novarome
Jaguar C13S/14S/ C14 COS/C17/C162/HP-8/HP-60	Guar gum	Hi-Tek
Kathon CG	Fungicide	Rohm&Haas
Kaydol	Mineral oil	Sonneborn
Keltrol/CG-T/G-T/ RD/T	Xanthan gum	Kelco
Kera-Quat WRP	Keratin	Maybrook
Kera-Tein AA	Keratin amino acids	Maybrook
Kera-Tein 1000/1000SD	Hydrolyzed keratin	Maybrook
Kera-Tein 1000 AS	Ethyl ester of hydrolyzed keratin	Maybrook
Kessco GMS-SE	Glyceryl stearate SE	Stepan
Kessco PEG 6000 DS	PEG-150 distearate	Stepan
Klucel G	Hydroxypropylcellulose	Aqualon
Kristine K/19718	Perfume	Robertet

RAW MATERIALS	CHEMICAL DESCRIPTION	SOURCE
Lactil	Blend	Goldschmidt
Lamacit GML-20	PEG-20 glyceryl laurate	Henkel
Lamecreme KS/KSM	Glyceryl stearate	Henkel
Lamecreme LPM	Base for o/w-type creams, s/e	Henkel
Lamepon PA-TR	TEA-abietoyl-hydrolyzed protein	Henkel
Lamepon S	Potassium coco-hydrolyzed animal protein	Henkel
Lamepon ST40/S-TR	TEA-Coco-hydrolyzed animal protein	Henkel
Lamepon UD	Potassium undecylenoyl hydrolyzed animal protein	Henkel
Lamequat L	Cationized collagen hydrolyzate	Henkel
Lamesoft LMG	Glyceryl laurate (and) TEA-coco-hydrolyzed animal protein	Henkel
Lamesoft 156	Hydrogenated tallow glycerides/ TEA-Coco-hydrolyzed animal protein	Henkel
Lanepene	Complex	
Laneto AWS	PPG-12, PPG-50 lanolin	Rita
Laneto-50	PEG-75 lanolin	Rita
Lanette E	Sodium cetearyl sulfate	Henkel
Lanette N	Cetearyl alcohol/sodium cetearyl sulfate	Henkel
Lanette O	Cetearyl alcohol	Henkel
Lanette SX/W	Cetearyl alcohol/sodium lauryl sulfate	Henkel
Lanette 14	Myristyl alcohol	Henkel
Lanette 16	Cetyl alcohol	Henkel
Lanette 18	Stearyl alcohol	Henkel

RAW MATERIALS	CHEMICAL DESCRIPTION	SOURCE
Lanette 22	Behenyl alcohol	Henkel
Lanolin USP		Rita
Lanolin X-TRA DEO		Rita
Lantrol	Liquid lanolin	Henkel
Lantrol AWS 1692	PPG-12 PEG-65 lanolin oil	Henkel
Lantrol 1673	Lanolin oil	Henkel
Lemon Passion Fruit Complex		Centerchem
Lexate CRC	Stearamidopropyl dimethyl/ glycol stearate/ceteth-2	Inolex
Lexemul EGMS	Glycol stearate	Inolex
Lexemul 55/55G/55SE	Glyceryl stearate	Inolex
Lexemul 561	Glyceryl stearate/PEG-100 stearate	Inolex
Lexemul EGMS	Glycol stearate	Inolex
Lexgard M	Methyl paraben	Inolex
Lexgard P	Propyl paraben	Inolex
Lexol IPM	Isopropyl myristate	Inolex
Lexorez 100	Glycerin/diethylene glycol/ adipate crosspolymer	Inolex
Lipocol SC-4	Ceteareth-4	Lipo
Lipo GMS 450	Glyceryl stearate	Lipo
Lipo IPP	Isopropyl palmitate	Lipo
Liponate GC	Caprylic/capric triglyceride	Lipo
Liponic EG-1	Glycereth-26	Lipo
Lipopeg 6000DS	PEG-150 Distearate	Lipo

RAW MATERIALS	CHEMICAL DESCRIPTION	SOURCE
Lipo-Peptide AME-30	Acetamide MEA/Lauroyl hydrolyzed collagen/glycerin	Maybrook
Liposorb P-20	Sorbitan ester	Lipo
Lipowax D	Cetearyl alcohol/ceteareth-20	Lipo
Light Mask 169-119	Fragrance	
#LK-40 Fragrance		Novarome
Locron L/P	Aluminum chlorohydrate	
Lovocryl 47	OAC-2	Nat Starch
Lunacera M	Microcrystalline wax	HB Fuller
Luviflex VBM 35	PVP/acrylates copolymer	BASF
Luvimer 100P	Acrylates copolymer	BASF
Luviquat FC370/ Mono CP	Polyquaternium	BASF
Luviset CAP	Vinyl acetate/crotonic acid/ vinyl propionate copolymer	Sherex
Luviskol VA37E/VA37I	Polvinylpyrrolidone	BASF
Luviskol VA64/VA73W/ VAP343E	PVP/VA copolymer	BASF
Mackalene 116/316/326 426/716	Amine salt surfactant	McIntyre
Mackam CET	Amphoteric surfactant	McIntyre
Mackam J	Cocamidopropyl betaine	McIntyre
Mackam WGB	Amphoteric surfactant	McIntyre
Mackam 2C	Disodium cocamphodiacetate	McIntyre
Mackam 35/35HP	Amphoteric surfactant	McIntyre

RAW MATERIALS	CHEMICAL DESCRIPTION	SOURCE
Mackamide CMA/LLM/PKM	Alkanolamide surfactant	McIntyre
Mackamine CAO/WGO	Amine oxide surfactant	McIntyre
Mackamine DC-50/EL/ LA/LO-Special/OD-35/QM/OP/WGD	Sulfosuccinate surfactant	McIntyre
Mackernium 007	Quaternary ammonium salt	McIntyre
Mackester EGDS/EGMS	Ester	McIntyre
Mackine 301/601		McIntyre
Mackol 70NS		McIntyre
Mackpro Conditioner		McIntyre
Mackpro WLW		McIntyre
Mackstat DM		McIntyre
Magnabrite HV	Magnesium aluminum silicate	Am Colloid
Marine-Dew/PC-100	Partially deacetylated chitin	Ajinomoto
Mayphos OL3N	DEA-Oleth-3 Phosphate	Maybrook
May Tein	Sodium/TEA Lauryl hydrolyzed keratin	Maybrook
Maytein C	Potassium cocoyl hydrolyzed collagen	Maybrook
Maytein CT	TEA-cocoyl hydrolyzed collagen	Maybrook
Maytein SY	TEA-cocoyl hydrolyzed soy protein	Maybrook
Maywax D	Cetearyl alcohol/ceteareth-20	Maybrook
Maywax P	Emulsifying wax, NF	Maybrook
Medialan LD	Sodium lauroyl sarcosinate	
Men's Fragrance A62119/794456		Haarman&
Merquat 280	Polymer	Calgon
Merquat 550	Polyquaternium-7	Calgon



RAW MATERIALS	CHEMICAL DESCRIPTION	SOURCE
Methocel E4M/40-202	Hydroxypropyl methylcellulose	Dow
Methyl Gluceth-20		Amerchol
Micro Ace P-2	Talc	
Mink Oil, Heavy Fraction/Light Fraction		Emulan
Miracare CT-100/MPC/SCS/XL		Rhone
Miranol C2M conc.	Disodium cocoamphodiacetate	Rhone
Miranol C2M Conc. NP	Cocoamphodiacetate	Rhone
Miranol C2M-SF Conc.	Surfactant	Rhone
Miranol DM Conc.(45%)	Surfactant	Rhone
Miranol MHT	Lauroamphoglycinate/trideceth sulfate	Rhone
Miranol Ultra C-32, Mirapol A-15, 133, 550	Surface active agent	Rhone
Mirasheen 202		Rhone
Mirataine BET-C-30, BET-O-30, CBC, CBS, COB, TM	Surfactant	Rhone
Moisturizing Liposome Complex		
Monamate CPA-40	Disodium cocamido MIPA-sulfo-succinate	Mona
Monamate OPA-30	Disodium oleamido PEG-2 sulfosuccinate	Mona
Monamid CMA	Cocamide MEA	Mona
Monamid 150 ADD		Mona
Monamid 150LW, 716	Lauramide DEA	Mona
Monaquat P-TC	Cocamidopropyl PG-dimonium chloride	Mona
Monomuls 90-L 12	Glyceryl laurate	Henkel

RAW MATERIALS	CHEMICAL DESCRIPTION	SOURCE
Monomuls 90-0 18		Henkel
Monateric CAB	Cocamidopropyl betaine	Mona
Monateric ISA-35	Sodium Isostearoamphopropionate	Mona
Monateric 1188M		Mona
M-Quat JO-50	Olealkonium chloride	PPG
Mulgofen ON-870		Rhone
Myvatex Texture Lite, Emulsifier Myvatex 60		
Myverol 18-06	Hydrogenated soy glyceride	Eastman
Myritol 318	Caprylic/capric triglyceride	Henkel
Nadex 360		Nat Starch
Nasuna B	PVP/Va copolymer	Henkel
Natrosol 250 HHR/ 250 HHX/250 HR	Hydroxyethyl cellulose	Aqualon
Nature Chem CR	Cetyl ricinoleate	CasChem
Nature Chem OHS	Octyl hydroxystearate	CasChem
Natural Extract DP	Trimethyl glycine	Rita
Nature's Herbal #165-050 Fragrance		
Neobee M-5	Caprylic/capric triglyceride	Stepan
Neo-Heliopan AV	Octyl methoxycinnamate	Haarman
Neo-Heliopan BB	Benzophenone-3	Haarman
Neo-Heliopan E1000	Isoamyl p-methoxycinnamate	Haarman
Neo-PC1 Water Soluble	Trideceth-9/PEG-3 octanoate	Dragoco
N-Hance	Guar hydroxypropyl trimonium chloride	Aqualon

RAW MATERIALS	CHEMICAL DESCRIPTION	SOURCE
Nikkol MYS-55	PEG-55 stearate	Nikko
Nikkol TL-10	Polysorbate 20	Nikko
Nikkol WCB		Nikko
Nipastat	Microbiocide	Nipa
Novarome Tuberose MG-02		
Novata Types	Cocoglycerides	Henkel
Noville #24093/ #27986/#28819/#31337/#31563/#84504	Fragrance	Noville
Nutrilan H/I/I-50/L	Protein partial hydrolyzate, sodium salt	Henkel
Octopirox	Piroctone olamine	Hoechst
Ohlan	Hydrogenated lanolin	Amerchol
Olaamin K	Prep of hydrogen peroxide fixatives for cold waves	Henkel
Omadine	Zinc pyrithione, 48%	Olin
Orgasol 2002D Extra Natural Cos: Nylon-12		Atochem
Ottasept Extra	Bactericide, fungicide	Ferro
Ozokerite Wax JH1680		Ross
Ozokerite Wax #871 Beaded		Ross
Panthenol		Tri-K
Paragon II	Preservative	McIntyre
Parso1 MCX	Octyl methoxycinnamate	Givaudan
Pationic ISL	Na Isostearoyl lactylate	Rita

RAW MATERIALS	CHEMICAL DESCRIPTION	SOURCE
Pationic SSL	Sodium stearoyl lactylate	Rita
Pationic 138C	Sodium lauroyl lactylate	Rita
Patlac IL	Isostearyl lactylate	Rita
Patlac LA	Lactic acid-88%	Rita
Patlac NAL	Sodium lactate	Rita
Peach Floral 92F/3235	Fragrance	FragResourc
Pecogel H-12	PVP/Polycarbamyl polyglycol ester	Phoenix
Pecosil CAP-1240	Silicone quaternium-9	Phoenix
Pecosil RS-100	Dimethicone copolyol phosphate	Phoenix
Pecosil SMQ-40	Silicone quaternium-5	Phoenix
Pecosil SPB-1240	Silicone quaternium-6	Phoenix
Pecosil SSP	Hydrolyzed soy protein/DCP copolymer	Phoenix
Pecosil SWP-83/ SWPQ-40	Hydrolyzed wheat protein/ Dimethicone copolyol phosphate	Phoenix
Pecosil WDS-100/ WDS-200	Dimethicone copolyol phosphate	Phoenix
PEG-75 Lanolin		Henkel
Pelan AC	Cetyl acetate/acetylated lanolin alcohol	Phoenix
Pelemol BB	Behenyl behenate	Phoenix
Pelemol DIA	Diisopropyl adipate	Phoenix
Pelemol EE	Eicosyl erucate	Phoenix
Pelemol GMS	Glyceryl stearate	Phoenix
Pelemol GS	Glyceryl stearate	Phoenix
Pelemol GTB	Glyceryl tribehenate	Phoenix

RAW MATERIALS	CHEMICAL DESCRIPTION	SOURCE
Pelemol G7A	Glycereth-7 triacetate	Phoenix
Pelemol ICB	Isoceteth behenate	Phoenix
Pelemol ISB	Isostearyl behenate	Phoenix
Pelemol ISL	Isostearyl lactate	Phoenix
Pelemol OP	Octyl palmitate	Phoenix
Pelemol OPG	Octyl pelargonate	Phoenix
Pelemol SPO	Cetyl/stearyl octanoate	Phoenix
Pelemol 89	Octyl Isononanoate	Phoenix
Pelemol 2022	Octyldodecyl behenate	Phoenix
Pelox P3M		Phoenix
Pemulen TR-1/TR-2	Acrylates/C10-30 alkyl acrylate crosspolymer	BFGoodrich
Permethyl 101A/102A	Isoeicosane/Isoostahexacontane	Presperse
Permulin 3510	Beeswax/vaseline	KosterKeun
Permulin 4200	Microcrystalline wax	KosterKeun
Phoenonip	Phenoxyethanol/etc.	Nipa
Phoenamid CD	Cocamide DEA	Phoenix
Phoenamide LD	Lauramide DEA	Phoenix
Phoenate SLES-70	Sodium laureth sulfate	Phoenix
Phoenate 3DSA	PEG-3 distearate	Phoenix
Phoenate 200 DL	PEG-4 dilaurate	Phoenix
Phoenatric CAB	Cocamidopropyl betaine	Phoenix
Phenoxide STA-2	Steareth-2	Phoenix
Phenoxide STA-100	Steareth-100	Phoenix
Phenoxol T	Cetearyl alcohol/ceteareth-20	Phoenix

RAW MATERIALS	CHEMICAL DESCRIPTION	SOURCE
Phospholipid EFA	Linolamidopropyl PG-dimonium chloride phosphate	Mona
Phospholipid SV		Mona
Phytelene Complex EGX-243/EGX-244	Complex chemical	
Plantaren 2000		Henkel
Plantaren PS 10/2000/2000 VP		Henkel
PNC 400	Sodium carbomer	3V
Polawax	Emulsifying wax, NF	Croda
Polycare 133		
Polydiol 400		Henkel
Polymer JR30M		UnionCarb
Polymer JR400/LR400	Polyquaternium-10	Amerchol
Polyox WSR-3000	PEG-14M	UnionCarb
Polyquart H81	PEG-15 Coco polyamine	Henkel
Polyquta 3000	Polyquaternium-10	Rita
Polyviol W25/140	Polyvinyl alcohol	
Polawax	Emulsifying wax NF	Croda
PPG-10 Cetyl Ether		Croda
PPG-10 Methyl Glucose Ether		Amerchol
Prisorine GTIS	Glycerol triisostearate	Unichema
Procetyl 10	PPG-10 cetyl ether	Croda
Procol OA-10	Oleth-10	Protameen
Prodew 100	Sorbitol/sodium lactate/etc.	Ajinomoto
Prodew 300	Sodium lactate/sodium PCA/etc.	Ajinomoto

RAW MATERIALS	CHEMICAL DESCRIPTION	SOURCE
Product SE-100	Glyceryl stearate/PEG-100 stearate	Heterene
Promois ECP	Collagen	Rita
Promulgen D	Cetearyl alcohol/ceteareth-20	Amerchol
Promulgen G	Stearyl alcohol/ceteareth-20	Amerchol
Propal	Isopropyl palmitate	Amerchol
Prosolal S9		Dragoco
Protachem SMO	Sorbitan oleate	Protameen
Protasorb L-20	Polysorbate 20	Protameen
Protasorb O-20	Polysorbate 80	Protameen
Pro-Tein ES-20	Ethyl ester of hydrolyzed collagen	Maybrook
Proto-Lan 4R	Cocoyl hydrolyzed collagen/etc.	Maybrook
Proto-Lan 8	Lecithin/etc.	Maybrook
Proto-Lan 30	Propylene glycol/etc.	Maybrook
Pur-Cellin Liquid/Solid		Dragoco
PVP K-60/PVP K-90/PVP K-30		ISP
PVP/VA E335/E535/E735	PVP/VA Copolymer	ISP
Pyocide 5192	Insecticide concentrate	MGK
Pyroter CPI-40	PEG-40 hydrogenated castor oil PCA isostearate	Ajinomoto
Pyroter GPI-25		Ajinomoto

RAW MATERIALS	CHEMICAL DESCRIPTION	SOURCE
Quat-Pro E	Triethonium hydrolyzed collagen ethosulfate	Maybrook
Quat-Pro S/S30	Stearyltrimonium hydroxy ethyl hydrolyzed collagen	Maybrook
Red & Blue Nuggets	Mineral oil in gelatin micro-capsules	RT Dodge
Resyn 26-1314		Nat Starch
Resyn 28-2913		Nat Starch
Resyn 28-2930		Nat Starch
Rewolan AWS	PEG-75 Lanolin oil	
Rhodacal A-246L		Rhone
Rhodacal A246LX		Rhone
Rhodacal DDB-40		Rhone
Rhodafac RS 610		Rhone
Rhodapex ESY		Rhone
Rhodapex MA360		Rhone
Rhodapex NA61		Rhone
Rhodapon ESY		Rhone
Rhodapon L-22 HNC		Rhone
Rhodapon LSB		Rhone
Rhodapon LT-6		Rhone
Rhodapon SB 8208S		Rhone
Rhodaquat M242B/99		Rhone
Rhodaquat M270C/18		Rhone



RAW MATERIALS	CHEMICAL DESCRIPTION	SOURCE
Rhodaquat 7LVF		Rhone
Rhodigel	Xanthan gum	
Rhodigel EZ	Xanthan gum	
Rilanit GMO	Glyceryl oleate	Henkel
Rilanit GMRO	Glyceryl ricinoleate	Henkel
Rita CA	Cetyl alcohol	Rita
Rita Cetearyl Alcohol		Rita
Ritachol	Mineral oil/lanolin alcohol	Rita
Ritachol 2000/5000	R.I.T.A. blend	Rita
Ritaderm	R.I.T.A. blend	Rita
Rita EGDS	Glycol distearate	Rita
Rita GMS	Glycerol monostearate	Rita
Rita IPM	Isopropyl myristate	Rita
Ritalan	Lanolin oil	Rita
Ritalan C	Isopropyl palmitate/lanolin oil	Rita
Ritaloe 200M	Aloe vera gel	Rita
Ritamide C	Cocamide DEA	Rita
Ritapan D	d-panthenol	Rita
Ritapan DL	dl-panthenol	Rita
Rita PEO-1	PEG-5M	Rita
Rita PEO-2	PEG-9M polyethylene oxide	Rita
Ritapeg 150 DS	PEG-150 distearate	Rita
Ritaphenone-3	Benzophenone-3	Rita
Ritaplast/50W	Mineral oil/polyethylene	Rita

RAW MATERIALS	CHEMICAL DESCRIPTION	SOURCE
Ritapro 100/165	R.I.T.A. blend	Rita
Ritapro 300	Cetearyl alcohol/ceteareth-20	Rita
Rita SA	Stearyl alcohol	Rita
Ritasynt IP	R.I.T.A. blend	Rita
Ritavena 5	Hydrolyzed oat flour	Rita
Ritawax ALA	R.I.T.A. blend	Rita
Ritawax 15	Laneth-15	Rita
Robane	Squalane, NF	
Rovisone ACE	Vitamin blend	Rita
Sandopan LS-24		
Satin Finish	Complex	
SF 18 (350) Silicone Fluid: Dimethicone		Dow Corn
Shampoo Fragrance A62120/794457		Haarman
Shebu Refined	Shea butter	Rita
Shebu WS	PEG-50 shea butter	Rita
Shellac Wax MHP105 DO		MHPShellac
Shellsol D70	Petroleum distillates	Shell
Silbione 70047 V300/70646/71634		
Silicone SF-1173		GE Silicone
Silicone 566 Fluid		DowCorn
Silk Pro-Tein	Hydrolyzed silk	Maybrook
Silwax WD-F/WS-L		Siltech
Simchin Refined	Jojoba oil	Rita

RAW MATERIALS	CHEMICAL DESCRIPTION	SOURCE
Sipon ES-2	Sodium laureth sulfate	Rhone
Sipon ESY	Sodium laureth-1 sulfate	Rhone
Solulan L-575/75	PEG-75 lanolin	Amerchol
Solulan 98	Polysorbate 80/cetyl acetate/ acetylated lanolin alcohol	Amerchol
Sorbo	Sorbitol, 70%	ICI
Soy-Quat C	Cocodimonium hydroxypropyl hydrolyzed soy protein	Maybrook
Soy-Tein NL	Hydrolyzed soy protein	Maybrook
Span 80	Sorbitan oleate	ICI
Spheron P-1500	Silica	
Standamid KD	Cocamide DEA	Henkel
Standamul 1616	Cetyl palmitate	Henkel
Standapol A	Ammonium lauryl sulfate	Henkel
Standapol EA-2	Ammonium laureth sulfate	Henkel
Standapol EA-3	Ammonium laureth sulfate (27%)	Henkel
Standapol ES-2	Sodium laureth-2 sulfate	Henkel
Standapol ES-3	Sodium laureth-3 sulfate	Henkel
Standapol T	TEA lauryl sulfate	Henkel
Standapol WAQ Spec.	Sodium lauryl sulfate	Henkel
Stearal	Stearyl alcohol	Amerchol
Stepanhold Extra	Hairspray resin	Stepan
Stepanhold R-1	Hairspray resin	Stepan
Stepanol AM	Ammonium lauryl sulfate	Stepan
Stepanol WAT	TEA lauryl sulfate	Stepan

RAW MATERIALS	CHEMICAL DESCRIPTION	SOURCE
Ster-O-Pro	Oat flour	QO
Sufadone LP-300		ISP
Sulfopan 101/ 101 spec./103	Sodium lauryl sulfate	Henkel
Sunarome UVA	Menthyl anthranilate	Felton
Sunburst 94F/2197		Fragrance
Sunflower Fragrance 12294		Chemia
Super Sat AWS-4	PEG-24 hydrogenated lanolin	Rita
Super Solan Flaked		Croda
Supro-Tein S	Sodium cocoyl hydrolyzed soy protein/sorbitol	Maybrook
Supro-Tein V	TEA-cocoyl-hydrolyzed collagen/ sorbitol	Maybrook
Suttocide A	Sodium hydroxymethyl glycinate	Sutton
Syncrowax HR-C	Glyceryl tribehenate	Croda
Syntase 230	UV absorber	Neville
Synthetic Beeswax JH-1508		

RAW MATERIALS	CHEMICAL DESCRIPTION	SOURCE
Tagat I2	PEG-20 glyceryl isostearate	Goldschmidt
Tagat L	PEG-30 glyceryl laurate	Goldschmidt
Tagat S	PEG-30 glyceryl stearate	Goldschmidt
Tagat TO	PEG-25 glyceryl trioleate	Goldschmidt
Tefose 2561	PEG-6 stearate/glyceryl stearate/ceteth-20	Gattefosse
Tegamine Oxide WS35	Cocamidopropyl amine oxide	Goldschmidt
Tegin	Glyceryl stearate SE	Goldschmidt
Teginacid	Glyceryl stearate/ceteareth-20	Goldschmidt
Teginacid H	Glyceryl stearate/ceteth-20	Goldschmidt
Tego Betaine F/F50	Cocamidopropyl betaine	Goldschmidt
Tego Betaine HS	Cocamidopropyl betaine/glyceryl laurate	Goldschmidt
Tego Betaine L-7	Cocamidopropyl betaine	Goldschmidt
Tego Pearl B-48	Cocamidopropyl betaine/etc.	Goldschmidt
Tego Pearl N100	Glycol distearate/steareth-4	Goldschmidt
Tegosoftware CT	Caprylic/capric triglycerides	Goldschmidt
Tegosoftware EE	Octyl octanoate	Goldschmidt
Tegosoftware GC	PEG-7 glyceryl cocoate	Goldschmidt
Tegosoftware M	Isopropyl myristate	Goldschmidt
Tegosoftware OP	Octyl palmitate	Goldschmidt
Tegosoftware OS	Octyl stearate	Goldschmidt
Tegosoftware P	Isopropyl palmitate	Goldschmidt
Tegosoftware SH	Stearyl heptanoate	Goldschmidt
Tegosoftware 189	Isooctadecyl isononanoate	Goldschmidt

RAW MATERIALS	CHEMICAL DESCRIPTION	SOURCE
Tergitol NP-10	Surfactant	UnionCarb
Texamid types	Sodium alginates	Henkel
Texapol LS 100F	Sodium lauryl sulfate	Henkel
Texapon A/ALS	Ammonium lauryl sulfate	Henkel
Texapon ASV ASV 70 Special	Mixture of special fatty alcohol ether sulfates	Henkel
Texapon CS Paste	Mixture of fatty alcohol sulfates	Henkel
Texapon EVR	Sodium lauryl ether sulfate with special additives	Henkel
Texapon IES	MIPA-laureth sulfate/cocamide DEA	Henkel
Texapon K12 granules K12 needles/K12 powder	Sodium lauryl sulfate (C12)	Henkel
Texapon K14S spec.	Sodium lauryl myristyl ether sulfate	Henkel
Texapon K1296	Sodium lauryl sulfate, pure	Henkel
Texapon LS needles	Sodium lauryl sulfate	Henkel
Texapon M	Monoethanolamine lauryl ether sulfate	Henkel
Texapon MG	Magnesium lauryl ether sulfate	Henkel
Texapon MGS	Magnesium lauryl sulfate	Henkel
Texapon MLS	Monoethanol ammonium lauryl sulfate	Henkel
Texapon NA	Ammonium laureth sulfate	Henkel
Texapon N25/N40	Sodium laureth sulfate	Henkel
Texapon N70/N70LS N103/NSO	Sodium lauryl ether sulfate	Henkel

RAW MATERIALS	CHEMICAL DESCRIPTION	SOURCE
Texapon NT	TEA-laureth sulfate	Henkel
Texapon OT needles	Sodium lauryl sulfate	Henkel
Texapon SB3	Disodium laureth sulfosuccinate	Henkel
Texapon SBN	Sodium laureth sulfate/disodium laureth sulfosuccinate	Henkel
Texapon SG	Sodium lauryl ether sulfate with special additives	Henkel
Texapon T42/TH	TEA lauryl sulfate	Henkel
Texapon V	Sodium lauryl sulfate	Henkel
Texapon WW99	MIPA-laureth sulfate/cocamide DEA	Henkel
Texapon Z	Sodium lauryl sulfate	Henkel
Timeron MP-1001/SI	Titanium dioxide/mica	
Timeron Super Copper Super Gold/Super Red/Pearl White	Mica/Titanium dioxide	
Tioveil AQ/AQ-G	TiO <sub>2</sub> dispersed	Tioxide
Tioveil OP	Octyl palmitate/titanium dioxide	Tioxide
Tioveil TG	TiO <sub>2</sub> dispersed	Tioxide
TL-10	PEG-20 sorbitan monolaurate	
Trideceth-9/PEG-40	Hydrogenated Castor Oil	Dragoco
Tris Amino	Tris (hydroxymethyl) amino-methane	Angus
Triton A-100/X-100	Surfactant	Rohm
Triton Z-100	Octoxynol-9	Rohm
Turpinal SL	Etidronic acid	Henkel
Turpinal 4NL	Tetrasodium etidronate	Henkel

RAW MATERIALS	CHEMICAL DESCRIPTION	SOURCE
Tween 20	Polysorbate 20	ICI
Tween 60	Polysorbate 60	ICI
Tween 80	Polysorbate 80	ICI
Tylose CB 200/H4000P	Sodium carboxymethyl cellulose	Hoechst
#U-9257 Fragrance		ShawMudge
Ultrahold Strong	Copolymer	BASF
Ultrahold 8	Acrylate/acrylamide copolymer	BASF
Unicide 4-13	Imidazolidinyl urea	
Uniphen P-23	Complex	
Unipherol U-14	Complex	
Unistab S-69	Trimethyldodecatrienol	
Unitrienol T-27	Farnesyl acetate/farnesol/ panthenyl triacetate	
UV-Titan M212/M262		Presperse
Uvinul M-40	Benzophenone-3	BASF
Uvinul MS-40	Benzophenone-4	BASF
Uvinul O-18	Octyl salicylate	BASF
Vanclay	Kaolin	Vanderbilt
Vanlube PCX	BHT	Vanderbilt
Vanseal CS	Cocoyl sarcosine	Vanderbilt
Vanseal LS	Lauroyl sarcosine	Vanderbilt
Varion CADG	Cocamidopropyl betaine	Sherex



RAW MATERIALS	CHEMICAL DESCRIPTION	SOURCE
Varionic LI-67	PEG-78 glyceryl cocoate	Sherex
Varisoft TC-90	Concentrate	Sherex
Veegum/F/HS/HV/K/ Plus/Ultra	Magnesium aluminum silicate	Vanderbilt
Vegetol LP	Propylene glycol/yeast extract	Gattefosse
Velvetex BA-35	Cocamidopropyl betaine	
Versene-EDTA/100	Chelating agent	Dow
Versenex 80	Pentasodium pentetate	Dow
Vigilan AWS		Fanning
Viscosontran HEC Types	Hydroxyethylcellulose/ highly purified	Henkel
Visconstran MC Types	Methyl cellulose, highly purified	Henkel
Viscontran MHPC Types	Methyl hydroxypropyl cellulose, highly purified	Henkel
Vitamin E	Tocopherol acetate	Rita
Wheat-Tein NL	Hydrolyzed wheat protein	Maybrook
Wickenol 161/163		CasChem
Wickenol 171	Octyl hydroxystearate	CasChem
Witcamide 511C	Oleamide DEA	Witco
Witcamide 6519	Lauramide DEA	Witco
Witconol APM	Nonionic surfactant	Witco
Zinc Omadine	Zinc pyrithione (48%)	Olin
Zincum N29		Henkel
80/20 Bradpride Soap Base		Bradford

## **Section XV**

# **Suppliers' Addresses**

Ajinomoto USA, Inc.  
Glenpoint Ctr, W  
500 Frank W. Burr Blvd.  
Teaneck, NJ 07645  
(201)-907-3244

Akzo Chemicals, Inc.  
300 S. Riverside Plaza  
Chicago, IL 60606  
(312)-906-7500/(800)-257-8292

Allied-Signal, Inc.  
P.O. Box 2332R  
Morristown, NJ 07962  
(201)-355-2000/(800)-526-0717

Amerchol Corp.  
P.O. Box 4051  
136 Talmadge Rd.  
Edison, NJ 08818  
(908)-248-6000

American Colloid Co.  
1500 W. Shure Rd.  
Arlington Heights, IL 60004  
(708)-392-4600

American Lecithin Co.  
33 Turner Rd.  
P.O. Box 1908  
Danbury, CT 06813  
(203)-790-2700

Angus Chemical Co.  
1500 E. Lake Cook Rd.  
Buffalo Grove, IL 60089  
(708)-215-8600/(800)-323-6209

Aqualon  
1313 N. Market St.  
Wilmington, DE 19899  
(302)-594-5000/(800)-345-8104

Atochem North America  
900 Milk St.  
Cartaret, NJ 07008  
(908)-541-4414

BASF Corp.  
100 Cherry Hill Rd.  
Parsippany, NJ 07054  
(201)-316-3000/(800)-526-1072

Bernel Chemical Co., Inc.  
174 Grand Ave.  
Englewood, NJ 07631  
(201)-569-8934

Brooks Industries, Inc.  
70 Tyler Place  
South Plainfield, NJ 07080  
(908)-561-5200

Calgon Chemical Corp.  
P.O. Box 717  
Pittsburgh, PA 15230  
(412)-787-6700/(800)-422-7266

Capital City Products Co.  
525 W. First Ave.  
Columbus, OH 43216  
(614)-299-3131/(800)-848-1340

CasChem, Inc.  
40 Avenue A  
Bayonne, NJ 07002  
(201)-858-7900/(800)-CAS-CHEM

Centerchem, Inc.  
225 High Ridge Rd.  
Stamford, CT 06905  
(203)-975-9800

Chemia Corp.  
631 Leffingwell Ave.  
St. Louis, MO 63122  
(800)-726-1976

ChemMark Development  
70 Tyler Pl.  
South Plainfield, NJ 07080  
(908)-412-6192

Ciba-Geigy Corp.  
410 Swing Rd.  
Greensboro, NC 27419  
(919)-632-7327/(800)-221-0453

Croda, Inc.  
7 Century Dr.  
Parsippany, NJ 07054  
(201)-644-4900

R.T. Dodge Co.  
55 Westpark Rd.  
Dayton, OH 45459  
(513)-439-4497

Dow Chemical USA  
2020 Dow Center  
Midland, MI 48674  
(800)-258-CHEM

Dow Corning Corp.  
Box 0994  
Midland, MI 48686  
(517)-496-4000

Dragoco, Inc.  
10 Garden Drive  
Totowa, NJ 07512  
(201)-256-3850

duPont  
1007 Market St.  
Wilmington, DE 19898  
(800)-441-7515

Eastman Chemical  
P.O.Box 431  
Kingsport, TN 37662  
(615)-229-4006/(800)-EASTMAN

Emulan, Inc.  
P.O. Box 582  
Kenosha, WI 53141  
(414)-654-0734

EM Industries, Inc.  
5 Skyline Drive  
Hawthorne, NY 10532  
(914)-592-4660

Fanning Corp.  
2450 W. Hubbard St.  
Chicago, IL 60612  
(312)-563-1234

Felton Worldwide  
599 Johnson Ave.  
Brooklyn, NY 11237

Ferro Corp.  
7050 Krick Rd.  
Walton Hills, OH 44146  
(216)-641-8580

Finetex, Inc.  
418 Falmouth Ave.  
Elmwood Park, NJ 07407  
(201)-797-4686

FMC Corp.  
1735 Market St.  
Philadelphia, PA 19103  
(215)-299-6000

Fragrance Resources, Inc.  
275 Clark St.  
Keyport, NJ 07735  
(908)-264-6767

H.B. Fuller Co.  
3530 N. Lexington Ave.  
St. Paul, MN 55126  
(612)-481-1816/(800)-468-6358

Gattefosse Corp.  
189 Kinderkamack Rd.  
Westwood, NJ 07675  
(201)-573-1700

GE Silicones  
260 Hudson River Rd.  
Waterford, NY 12188  
(518)-237-3330/(800)-255-8886

Givaudan-Roure Corp.  
100 Delawanna Ave.  
Clifton, NJ 07015  
(201)-365-8000

Goldschmidt Chemical Corp.  
914 E. Randolph Rd.  
Hopewell, VA 23860  
(804)-541-8658/(800)-445-1809

B.F. Goodrich Co.  
9911 E. Randolph Rd.  
Hopewell, VA 23860  
(216)-447-5000/(800)-331-1144

W.R. Grace & Co.  
55 Hayden Ave.  
Lexington, MA 02173  
(617)-861-6600/(800)-354-5414

Haarman & Reimer Corp.  
60 Diamond Rd.  
Springfield, NJ 07091  
(201)-912-5707/(800)-432-1559

Henkel Corp.  
11501 Northlake Dr.  
Cincinnati, OH 45299  
(513)-530-7300/(800)-543-7370

Heterene Chemical Co., Inc.  
295 Vreeland  
P.O.Box 247  
Paterson, NJ 07543  
(201)-278-2000

Hi-Tek Polymers, Inc.  
9808 Bluegrass Pkwy  
Jeffersontown, KY 40299  
(502)-499-4011/(800)-626-2613

Hoechst Celanese Corp.  
3340 W. Norfolk Rd.  
Portsmouth, VA 23703  
(804)-483-7530/(800)-526-4960

Hydrolabs, Inc.  
27 E 33 St.  
Paterson, NJ 07514  
(201)-345-5100

ICI Americas Inc.  
Concord Pike & New Murphy Rd.  
Wilmington, DE 19897  
(302)-575-3034/(800)-822-8215

Inolex Chemical Co.  
Jackson & Swanson Sts.  
Philadelphia, PA 19148  
(215)-271-0800/(800)-521-9891

International Specialty Products  
1361 Alps Rd.  
Wayne, NJ 07470  
(201)-628-3000/(800)-848-7659

Kelco Div.  
Merck & Co., Inc.  
8355 Aero Drive  
San Diego, CA 92123  
(619)-292-4900/(800)-535-2656

Koster Keunen, Inc.  
P.O. Box 447  
90 Bourne Blvd.  
Sayville, NY 11782  
(516)-589-0456

Lipo Chemicals, Inc.  
207 19th Ave.  
Paterson, NJ 07504  
(201)-345-8600

Lonza, Inc.  
17-17 Rte. 208  
Fair Lawn, NJ 07410  
(201)-794-2400/(800)-777-1875

Maybrook, Inc.  
570 Broadway  
P.O. Box 68  
Lawrence, MA 01841  
(508)-682-1853

McIntyre Group Ltd.  
1000 Governors Hwy  
University Park, IL 60466  
(708)-534-6200

McLaughlin Gormley King Co.  
8810-10th Ave. N  
Minneapolis, MN 55427  
(612)-544-0341

Mona Industries, Inc.  
76 E. 24 St.  
P.O. Box 425  
Paterson, NJ 07544  
(201)-345-8220

Morflex, Inc.  
2110 High Point Rd.  
Greensboro, NC 27403  
(919)-292-1781

Penreco  
138 Petrolia St.  
Karns City, PA 16041  
(412)-283-5600/(800)-245-3952

Phoenix Chemical, Inc.  
322 Courtyard Dr.  
Somerville, NJ 08876  
(908)-707-0232

PPG Industries  
3938 Porett Drive  
Gurnee, IL 60031  
(708)-244-3410/(800)-CHEM-PPG

Presperse Inc.  
610 Hadley Rd.  
P.O. Box 735  
South Plainfield, NJ 07080  
(908)-756-2023

Protameen Chemicals, Inc.  
375 Minnisink Rd.  
Totowa, NJ 07511  
(201)-256-4374

QO Chemicals  
P.O. Box 2500  
West Lafayette, IN 47906  
(317)-497-6300/(800)-621-9521

National Starch & Chemical Co.  
10 Finderne Ave.  
Bridgewater, NJ 08807  
(908)-685-5000/(800)-532-1115

Neville Chemical Co.  
2800 Neville Rd.  
Pittsburgh, PA 15225  
(412)-331-4200

Nipa Laboratories, Inc.  
104 Hagley Bldg.  
Concord Plaza  
3411 Silverside Rd.  
Wilmington, DE 19810  
(302)-478-1522

Novarome Inc.  
30 Stewart Pl.  
Fairfield, NJ 07004  
(201)-575-4550

Noville  
1312 Fifth St.  
North Bergen, NJ 07047  
(201)-867-9080

Rheox, Inc.  
P.O. Box 700  
Hightstown, NJ 08520  
(609)-443-2320

Rhone-Poulenc  
Surfactants & Specialties  
Prospect Plains Rd.  
Cranbury, NJ 08512  
(609)-860-3025

RITA Corp.  
1725 Kilkenney  
Woodstock, IL 60098  
(815)-337-2500/(800)-426-7759

Robertet Inc.  
125 Bauer Drive  
Oakland, NJ 07436  
(201)-337-7100

Frank B. Ross Co., Inc.  
P.O. Box 4085  
Jersey City, NJ 07304  
(201)-433-4512

Sandoz Chemicals Corp.  
4000 Monroe Rd.  
Charlotte, NC 28205  
(704)-331-7234/(800)-631-8077

Shaw Mudge & Co.  
P.O. Box 1375  
Stamford, CT 06904  
(203)-327-3132

Sonneborn Division  
Witco Corp.  
520 Madison Ave.  
New York, NY 10022  
(212)-605-3981

Stepan Co.  
22 W. Frontage Rd.  
Northfield, IL 60093  
(708)-446-7500

Sun Chemical Corp.  
411 Sun Ave.  
Cincinnati, OH 45232  
(513)-681-5950/(800)-343-2583

Sutton Laboratories, Inc.  
116 Summit Ave.  
Chatham, NJ 07928  
(201)-635-1551

Terry Laboratories, Inc.  
390 N. Wickham Rd.  
P.O. Box 566  
Melbourne, FL 32935  
(407)-259-1630/(800)-367-2563

Tioxide Specialties, Ltd.  
Billingham, Cleveland TS23 1PS  
United Kingdom  
0642-370300

Tri-K Industries, Inc.  
P.O. Box 312  
27 Bland St.  
Emerson, NJ 07630  
(201)-261-2800/(800)-526-0372

3V Inc.  
1500 Harbor Blvd.  
Weehawken, NJ 07087  
(201)-865-3600

Unichema North America  
4650 S. Racine Ave.  
Chicago, IL 60609  
(312)-376-9000/(800)-833-2864

Union Carbide Chemicals & Plastic  
39 Old Ridgebury Rd.  
Danbury, CT 06817  
(203)-794-5300

R.T.Vanderbilt Co., Inc.  
30 Winfield St.  
P.O. Box 5150  
Norwalk, CT 06856  
(203)-853-1400

Van Dyk  
Main & William Sts.  
Belleville, NJ 07109  
(201)-450-3264

Witco Corp.  
5777 Frantz Rd.  
P.O. Box 646  
Dublin, OH 43017  
(614)-764-6500/(800)-366-6500